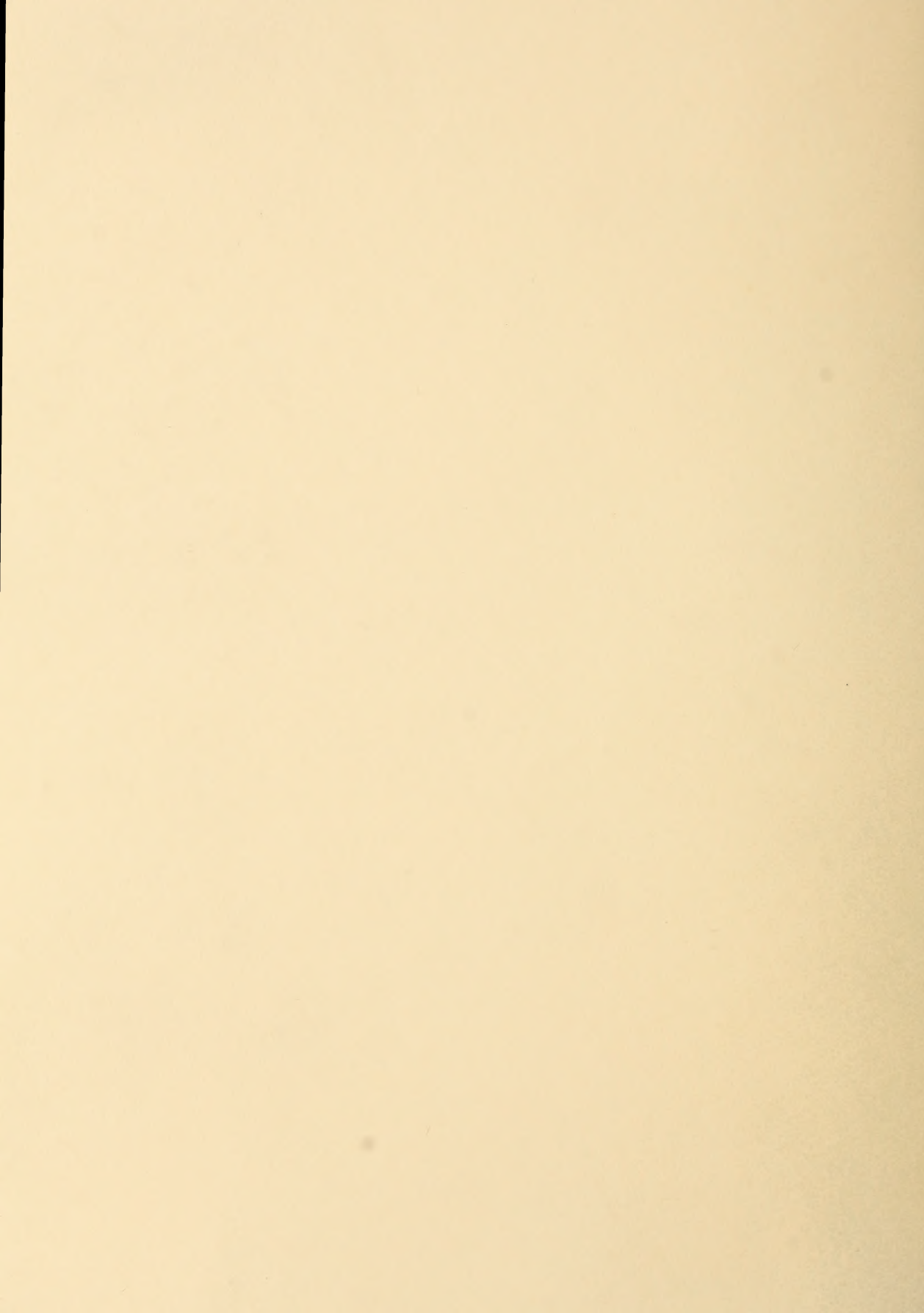


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





62.97 Will H. Jones, Jr.

# Theo. Koss

488 NATIONAL AVE.  
MILWAUKEE, WIS.



1 9 1 3



GARDEN <sup>AND</sup> FARM SEEDS  
POULTRY SUPPLIES ETC



# 1913

## TO MY FRIENDS AND CUSTOMERS:—

In presenting my Catalogue for 1913, I wish to express my thanks to the multitude of customers for their generous patronage, which I have enjoyed in the past, and to assure them that I will use my best endeavors to merit a continuance of their good-will and orders in the years to come. Many, no doubt, dislike to order but a few packets of seed which they may want, but I would like to emphasize the fact that I solicit the orders of all buyers, no matter how small or how large.

I want my catalogue to be in the hands of every person who expects to buy seeds. I will appreciate the courtesy, if, when you send me an order for any of your neighbors, you will give their address.

I have not shown any varieties in my catalogue that do not possess real merit. My Garden, Farm and Flower Seeds are all the standard sorts and the best that can be had. In my descriptions I have endeavored to be exact, being especially desirous to avoid exaggeration. My Seeds are good, the plain truth is all that is necessary.

The United States Mail and its thousands of Rural Free Delivery carriers, over the whole country, bring my Seed Store to every farmer's and gardener's door, as I will deliver, postage paid, all vegetable and flower seeds offered in this catalogue by the packet, ounce and quarter pound. For amount of postage on larger quantities see paragraph headed "Seeds by Mail" on this page and also on my Order Blank. Seeds can be sent by mail in any quantity not exceeding eleven pounds in one package.

### WHAT I GUARANTEE.

I guarantee that if I cannot promptly fill your order for any item, that I will at once return the money sent for same.

I guarantee that I will not keep your money, send you "due bill" or substitute something you do not want.

I guarantee that seeds ordered from this catalogue will prove of satisfactory purity and germination to you, or they may be returned at my expense, and the money that has been paid will be cheerfully and promptly refunded without "ifs and ands."

I prefer that remittance be made by Bank Draft, Express or Post Office Money Order, and I Guarantee that money sent in that way will reach me.

I accept postage stamps, currency or coin, but I Do Not Guarantee that money sent in that form will reach me.

### SUGGESTIONS TO CUSTOMERS.

Cash should always accompany the order. No goods sent C. O. D. **SEEDS BY MAIL.**—All seeds in packets, ounces and quarter pounds will be sent postpaid by mail at prices quoted; on parcels containing more than a quarter pound, postage must be added at the rate of 8 cents per pound; on Beans and Peas 8 cents per pint and 15 cents per quart, and on Corn, 6 cents per pint and 10 cents per quart.

**SIGN YOUR NAME AND ADDRESS.**—Many orders reach me every season in which the Name and Post Office Address are lacking. It is of course impossible for me to fill these orders until they are identified.

**SHIPPING DIRECTIONS.**—Shipping directions should accompany all orders. Where no particular mode of transportation is designated I shall exercise my best judgment, and forward by express, freight or mail, as may seem most advisable.

### USE THE ORDER SHEET AND ADDRESSED ENVELOPE.

## SPECIAL OFFER!

As an inducement to purchasers of my seeds in packets and ounces only, I make this most liberal offer, but I wish it thoroughly understood that it applies to orders for seed in **PACKETS AND OUNCES ONLY**, and not to orders for ¼ pounds, pints, quarts, or collections.

Purchasers Sending	\$1.00	May Select Seeds in Packets or Ounces Amounting to . . . .	\$1.30
	2.00		2.65
	3.00		4.00
	4.00		5.35
	5.00		6.75

**DELIVERED FREE BY MAIL TO ANY ADDRESS IN THE UNITED STATES OR CANADA.**

See Bargain Collections on Back Cover Page.

The prices quoted in this catalogue are those current at the time of going to press—January, 1913. They are subject to change with the fluctuations of the market without notice.

THEO. KOSS.

**POULTRY SUPPLIES.**—I want to call your attention to this department of my business and the pages in this catalogue that are devoted to same. I carry the largest and most complete stock of Poultry Supplies in the Northwest, and can fill your orders for anything you want in this line.



"Our papa wants an order from you!"



*Will H. Tracy, Jr.*



Comprising all the standard varieties as well as all novelties of real merit. Grown in climates and under conditions best suited to their perfect development.

## ASPARAGUS.

Asparagus is so easily grown and such a large quantity is produced on a small amount of ground that every garden should contain a bed. A bed ten feet square requiring 50 plants will give an abundant supply for any ordinary family. Soak the seed 4 hours in tepid water; sow early in spring in rows a foot apart; keep clean by frequent weeding and hoeing.

\*\*\*\*\*  
**ASPARAGUS CULTURE.** A special book that gives the most practical methods of raising, cultivating, harvesting, marketing, forcing and canning asparagus. This authoritative up-to-date book, postpaid, 50 cts.  
 \*\*\*\*\*

One ounce of seed will sow 40 feet of row; 7,260 roots will plant an acre.

**Columbian Mammoth White.**—A new and distinct variety with pure white shoots of very large and vigorous growth and superior quality, remaining a long time in edible condition. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

**Palmetto.**—Very early and desirable on account of its large size, regular growth, great productiveness and excellent quality. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

**Conover's Colossal.**—A well tried standard variety, large size, quick growth, good quality. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c.

**ASPARAGUS ROOTS.** Two-year old roots.

**Columbia Mammoth White.**—By express, 100, 80c; 1000, \$6.50.

**Palmetto.**—By express, 100, 75c; 1000, \$6.00.

**Conover's Colossal.**—By express, 100, 60c; 1000, \$5.00.



Columbian Mammoth White Asparagus.

## BEETS.

One ounce to 50 feet of drill; 5 pounds to the acre in drills.

**Culture.**—The best soil for beets is one that is rather light and thoroughly enriched with manure. For an early supply, sow in spring as soon as the ground becomes fit to work, in drills about 1 foot apart and 2 inches deep. For main crop, sow the first week in May, and for winter use sow in June.

**Crimson Globe.**—A very early variety, of spherical form. Skin very smooth and it is as handsome a beet as you can imagine. It is of a rich, deep red color shading to purple. Cooks readily, and is very fine grained. Its flavor cannot be surpassed. When cooked it is of even, dark color throughout, and is attractive when on the table. Of uniform shape and size. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.15.



**Edmund's Turnip.**—A new and very superior variety. Nearly as early as the Eclipse. The skin and flesh are deep blood red in color, exceedingly sweet and tender, of good market size, round and smooth, with a single tap root, top very small. Cannot fail to give the highest satisfaction for winter or summer use. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

**Crosby's Egyptian.**—An improved strain of the Egyptian. While bearing as early, it is much thicker, smoother, of better color and quality than its parent. A most desirable beet. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

**Early Blood Turnip.**—Tender and a good late keeper. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

**Eclipse.**—An early variety, globe shaped, smooth, with firm small top, very sweet, flesh fine and dark red color. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

**Long Smooth Blood Red.**—Tender and sweet, excellent for winter use. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

**Swiss Chard or Silver Beet.**—A distinct vegetable and much superior to the common beets for greens. If sown at the same time, it will be fit to use before them. Later the plants form broad, flat, beautiful white and wax-like stems to the leaves, which are very delicious cooked as beets, or pickled. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.



## BEANS.

One quart to 100 feet of drill;  $1\frac{1}{2}$  bushels to the acre in drills.

Culture—About the first of May select a warm, dry, sheltered spot; dig and manure slightly; make drills 2 inches deep and 18 inches to 2 feet apart; drop the beans three inches apart in the drills, and cover not more than 2 inches deep.

**BEAN CULTURE.** By Glen C. Sevey. The only thorough and comprehensive book treating on the planting, raising and marketing of beans. New and highly valuable methods of cultivation and care are described. Postpaid, 50 cents.

### DWARF WAX BEANS.

**Davis' Kidney Wax.**—A new white, rustless, productive, wax-podded bean; pods flat, very long, white, straight and handsome; seeds clear white; excels all others in hardiness and productiveness. One of the best for shipping as snap beans and of the greatest value as a market variety. The length, uniformly perfect shape and fine color of the pods and the clear, white seed, make this one of the best for canners. It is just what they want; a long, straight, clear white pod which does not discolor in canning. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.65; bush., \$6.00.

**Improved Golden Wax.**—In spite of all the new sorts of beans being introduced every year, our trade calls for more Golden Wax than any other variety. This great popularity is due largely to the fact that the variety we have is a great improvement on the old Golden Wax, having larger pods and being more prolific. This improved stock is one of the handsomest beans we have ever seen, the pods a dark, rich golden yellow color and of perfect shape. For family or market you make no mistake in planting them. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.65; bush., \$6.00.

**Improved Rust-Proof Golden Wax.**—Exceedingly crisp and tender and of a most delicious flavor. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.60; bush., \$6.00.

**Prolific Black Wax.**—Bright, rich yellow in color, very tender, rich and buttery when cooked. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.60; bush., \$6.00.

### DWARF GREEN-PODDED VARIETIES.

**Improved Early Red Valentine.**—About 10 days earlier than the common Early Valentine. In addition to this it is more robust and vigorous, and produces the true, round, curved pods abundantly. Unexcelled in quality and uniformity of ripening, nearly the whole crop can be taken at one picking, usually within 35 days after planting. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.50; bu., \$5.75.

**Burpee's Stringless Green Pod.**—The only stringless green pod bush bean in cultivation. Consequently it surpasses all others in crisp, tender flavor. The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than the Valentine. It is of immense value, not only to the market gardener, but also to the amateur who seeks a rare quality early for the home table. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.50; bu., \$5.75.

**Refugee, or Thousand to One.**—Hardy, yields abundantly, and of fine quality. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.30; bu., \$4.75.

**Burpee's Dwarf Lima.**—A dwarf or bush form of the true large Lima which is of great value. They are of bush form, growing 18 to 20 inches high, of stout, erect growth, yet branching and vigorous; an immense yielder. Does not always mature dry shelled beans here, but yields a crop of green ones. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75.

**Henderson's Dwarf Lima.**—Grows in compact bush form, producing enormous crops of delicious Lima beans which can be as easily gathered as the common garden bush bean; it is at least two weeks earlier than any of the climbing Limas; produces a continuous crop from the middle of July until frost. Enormously productive. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75.

**BEANS—Pole or Running. One Quart to 150 Hills.**

**King of the Garden Lima.**—An improvement on the large White Lima, producing a continuous bloom and fruitage to the end of the season. Pods are of enormous size. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75.

**Old Homestead, or "Kentucky Wonder."**—The pods, usually 7 inches or more in length, are so fleshy that they are greater in width than breadth, being deeply creased or "saddlebacked." They are solidly meaty, stringless when young, and of the finest quality. If pods are gathered as they mature, the vines will continue to bear to the end of the season. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.50.

**German Black Wax Pole.**—A superb variety, growing rapidly, very productive, rich golden yellow color, round, full and fleshy. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75.

**Horticultural Pole.**—Beans round, oval, speckled, popular for private use. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.60.

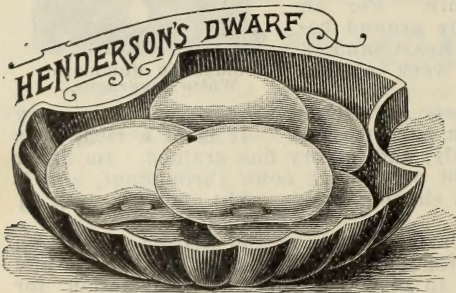
**Scarlet Runner.**—Cultivated for ornamental purposes. Pkt., 5c; pt., 15c; qt., 30c.

### BEANS—English.

**Broad Windsor.**—Largest and best. Pkt., 5c; pt., 15c; qt., 30c.



Improved Golden Wax Beans.





GROWN FOR  
FEEDING STOCK.



## MANGEL-WURZEL and SUGAR BEETS

Mammoth Long Red  
Mangel-Wurzel.

We strongly recommend the Mangels and Sugar-Beets for feeding to cattle, sheep and swine. The roots grow to a very large size, make a much heavier yield than turnips, and are more nutritious and fattening for food during the winter, largely increasing the yield of milk in cows. They can be grown at trifling cost.

**Culture.**—All Mangels require a deep soil, so put a subsoil at least a foot to 18 inches deep and apply plenty of rich stable manure. Sow (five to eight pounds to the acre) in rows 18 inches to 2 feet apart, and thin to 8 inches in the row. As soon as frost occurs, dig the crop, and if wanted for gradual consumption during the winter, they should be heaped to a height of 5 or 6 feet on a dry sloping situation. As the weather gets colder, cover with salt hay or corn-stalks, and afterward sufficient soil to protect from freezing weather. By this gradual process of covering all danger of heating is obviated.

**Prize Long Red.**—A popular and very productive variety. Oz., 5c;  $\frac{1}{4}$  lb., 10c; lb., 30c; 5 lbs., \$1.45.

**Mammoth Long Red.**—Remarkable for its handsome, thick, uniform shape and very broad shoulders, its diameter being greater and its weight much heavier than the Prize Long Red. Flesh is deep red, containing less water and more sugar than many other Mangels, making it more nutritious and milk-producing. Sheep also thrive better when fed on it, picking out pieces of it in preference to other kinds. Has been known to produce 60 tons to the acre. Oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 35c; 5 lbs., \$1.50.

**Golden Tankard.**—A smooth yellow-fleshed Mangel; the roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap-root. It grows largely above the soil and is easily harvested. It yields an enormous bulk on good land, and can be grown closely in rows. Oz., 5c;  $\frac{1}{4}$  lb., 15c; lb., 35c; 5 lbs., \$1.50.

**Champion Yellow Globe.**—A favorite round variety. Oz., 5c;  $\frac{1}{4}$  lb., 15c; lb., 35c; 5 lbs., \$1.50.

**Vilmorin's Improved.**—An imported French variety, very rich, containing usually as high as 16 per cent of sugar. Oz., 5c;  $\frac{1}{4}$  lb., 15c; lb., 40c; 5 lbs., \$1.80.

**Klein Wanzleben.**—This kind is grown on a larger scale than any other sugar beet. The root is conical, straight and even, quite large at the head and rapidly tapering. It is easy to dig and is a heavy yielder. Oz., 5c;  $\frac{1}{4}$  lb., 15c; lb., 40c; 5 lbs., \$1.80.

### BRUSSELS SPROUTS.

One ounce will sow 300 feet of drill.

Brussels Sprouts are being more extensively grown and used. Home gardeners are finding out that this delicious vegetable can be as easily grown as cabbage. Sow in May and manage as Winter Cabbage. In the fall break the leaves down so that the little cabbage will have more room to grow.

**Dwarf Improved.**—A fine strain. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 35c; lb., \$1.25.



## CABBAGE.

One ounce of seed will produce about 2,000 plants. Set 8,000 to 10,000 plants to the acre, of the early sorts, and 6,000 of the large, late kinds.

No vegetable is of greater importance than cabbage, and compared with the cost of seed, there is more money in growing cabbage than any other crop. It does not pay, therefore, to take any risk in buying seed. We have had our cabbage seed grown by the same growers for about sixteen years past, and it has proven of uniformly excellent quality, so that we pride ourselves on having the purest and highest grade of cabbage seed that is offered, or at least it is surpassed by none. The cabbage requires a deep, rich soil and thorough working to insure good, solid, full-sized heads. Sow early sorts in hot-beds in February or March, or in open ground as soon as it can be worked. Later or winter crops in May or June, in shallow drills, six inches apart. When the plants are four inches high transplant to richly manured ground, the early kinds two feet apart; the fall and winter varieties three feet apart. Packets contain about 800 seeds. Slug Shot and tobacco dust are used to kill insects and worms.

**HOW TO GROW CABBAGES.** A fine new booklet that gives instructions how to grow cabbages from seed time until harvest. Written by J. H. Gregory, a recognized authority on this subject. Postpaid, 40 cts.

**Early Spring or Flat Parisian**—An extra early flat-headed Cabbage, coming in with Jersey Wakefield. The great value of this extra early Cabbage lies in the fact that it is a true flat-headed sort. Planted on the same day as Early Jersey Wakefield, it was ready to cut with it and produced heads twice the weight of Wakefield. It is very solid and regular in shape, has few outside leaves and possesses a very fine texture and flavor. On account of its having very small outside leaves, it can be planted as closely as any of the pointed-headed cabbages. No market-grower should be without Early Spring for his first crop. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; 1 lb., \$2.00.

**Early Jersey Wakefield**—Considered by many gardeners the very best first early variety. Of large size for so early a kind and is certainly deserving of its great popularity. Heads hard and solid, and have few outside leaves. Our seed is highest in quality. American grown. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Charleston Large Wakefield**—This grand variety is a trifle later than Jersey Wakefield, but produces much larger heads which are of perfect pyramidal shape, very solid, and with few outside leaves. One cabbage grower who is enthusiastic in its praise says: "It is first in head, first in market, and first in the hearts of gardeners." Grows remarkably uniform, the heads are of even size and shape. Unequaled for market or family garden. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.50.

**Henderson's Early Summer**—A most excellent variety. Twenty days later than the Wakefield, but it grows to fully double the size of the latter. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

**Fottler's Improved Brunswick**—An early drum-head of large size, ready for market soon after first early sorts. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.



Henderson's Early Summer Cabbage.



Surehead Cabbage.

**Succession** — (True Stock.) A medium early variety and such a good keeper, that it is valuable for both early and late use. The largest growers say it is one of the best marketing cabbages ever introduced, and I want to add that it is also fine for the home garden. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$1.85.

**Large Late Drumhead**—Large, round and solid. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.65.

**Surehead** — (Genuine Strain.) All head and always sure to head; this very popular variety is rightly named Surehead because it never fails to form a good, solid head, even on poor soil, but the richer the soil the larger and finer the head. It is the finest late cabbage in this country, and the best market variety, and heads the list for winter use. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

**Premium Flat Dutch**—The standard winter variety, low growth, heads large, round, solid and flat on top, an excellent keeper. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.65.

**Koss' Short-stem Drumhead**—Our improved and selected strain of this popular variety has greatly pleased thousands of our customers during the past ten years, and so greatly has it improved during the time that we have had it that in a large field it is almost impossible to find a head that is not solid and well formed. For sureness in heading, regularity in growth, and even, large, solid heads, it far surpasses any other strain of late cabbage which we have seen, ripening evenly with very short stem or stalk, and large thick heads of silky fine quality and of best keeping properties. It is almost all head and always sure to head. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.



**CABBAGE—Continued.**

**Luxemburg.**—Also known as Hard Head. Makes a very hard head of a large size and extraordinary weight, and is remarkable for its keeping qualities. An excellent sort for late spring use. Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.25.

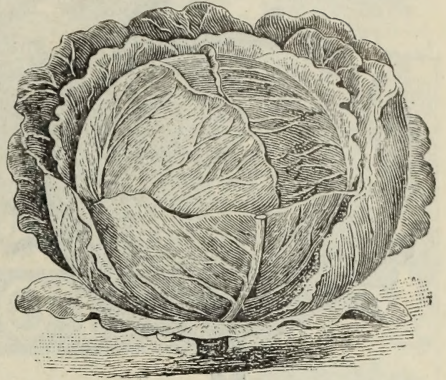
**The Hollander.**—The best cabbage for late spring sales and for shipping. This has become known in the past ten years as the most reliable cabbage for the shipping trade, and has been almost universally used in districts famous for cabbage growing, such as Racine, Wis., Central New York, Michigan districts and others. It is as hard as rock and a small sized head will weigh more than a large sized head of other sorts. Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 85c; lb., \$3.00

**Early Dark Red Erfurt.**—Early and valuable for pickling. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Mammoth Red Rock.**—A market gardener's strain of unusual size, color and weight, the result of careful and intelligent selection. It has proven very valuable. Its handsome appearance, large size, solidity and good quality will make it very desirable to all who like red cabbage. Solid and as good a keeper as any red cabbage. Color very dark red. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c; lb., \$2.50.

**Early Dwarf Ulm Savoy.**—One of the earliest and sweetest of the Savoy. Heads round, solid; leaves small, thick, fleshy; of fine deep green color, and of most excellent quality. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

**Drumhead Savoy.**—Heads large, round, compact, excellent for winter use. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; lb., \$1.60.



The Hollander Cabbage.

**SWEET CORN.** Prices subject to change.

One quart will plant 200 hills; one peck will plant an acre in hills.

**Culture.**—Plant in hills 3 feet apart each way and 5 or 6 kernels in a hill. The ground should be made rich with well-rotted manure. Hoe well. To have the finest Sweet Corn, it must be picked in just the right condition; that is when the skin of the grain breaks at the slightest puncture, and plantings should be made frequently enough to have a supply at this stage. The quality will be inferior if it is either a few days too old or too young.



Cory Sweet Corn

**Peey o'Day.**—The two points of this remarkable new Corn are its extraordinary earliness and sweetness. The early varieties of Sweet Corn do not, as a rule, yield as heavily as the later sorts; but owing to the fact that the stalks bear from two to three ears each, and that they are very dwarf, which admits of their being planted close together, it not only gives an early yield, but it gives one of great productiveness as well. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.10; bush., \$4.00.

**Golden Bantam.**—This handsome new variety is one of the most delicious of all and generally believed to be the richest in flavor. It is an extremely early sort, of hardy, vigorous growth, so that it can be planted quite early. The stalks grow only about four feet high, but bear two or three good ears five or six inches long and of handsome golden yellow color. In flavor it is quite distinct from the white sorts and some have called it sweet as honey. I advise every one to give it a trial. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.25; bush., \$4.50.

**Cory.**—The earliest, productive, and in great demand. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.10; bush., \$4.00.

\* **Early Minnesota.**—Early, very productive, and of excellent quality. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.10; bush., \$4.00.

**Country Gentleman.**—The most delicious of all sweet corns, the ears are somewhat smaller than the coarser varieties, but for private family use, where quality is preferred to size, it has no equal. Time of ripening is a little later than Stowell's Evergreen. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.25; bush., \$4.50.

**Black Mexican.**—Sweet and desirable for family use. When dry the kernels are black. The corn, when in condition for the table, cooks remarkably white, and is not excelled in tenderness by any other sort.

Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.10; bu., \$4.00.

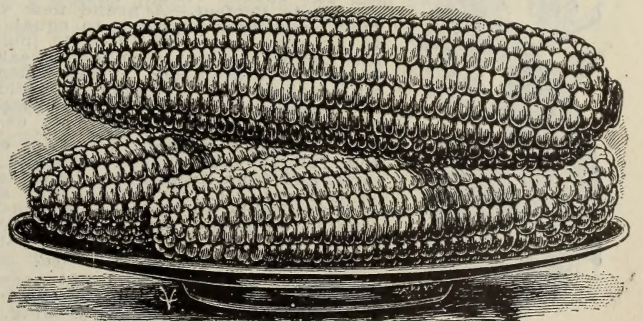
**Stowell's Evergreen.**—An excellent late variety, remaining a long time in a condition suitable for boiling. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.10; bu., \$4.00.

**CORN—POP.**

**White Rice.**—This is an exceedingly handsome variety of pop corn. It is a fine popper and produces very heavily. Pkt., 5c; pt., 15c; qt., 25c.

**CORN—FIELD.**

(See Farm Seed Department.)



Stowell's Evergreen Sweet Corn.



## CAULIFLOWER.

One ounce will produce about 2000 plants.

**Culture.**—For spring crops the seed should be sown in hot-beds early in February, transplanting the young plants to the garden early in April. For the main or fall crop, seed should be sown about June and the young plants set out the latter part of July.

**Early Snowball.**—Throughout the country this is considered not only the earliest of all cauliflowers, but it is more certain to make a head than any other sort. Its dwarf habit and short outer leaves allow it to be planted as close as 18 to 20 inches apart each way, thus making it especially valuable to market gardeners. Pkt., 20c; ¼ oz., 75c; oz., \$2.50; ¼ lb., \$9.00.

**Extra Early Dwarf Erfurt.**—Valuable for forcing. A very popular variety in Europe and with eastern gardeners. First quality. Pkt., 15c; ¼ oz., 60c; oz., \$2.25; ¼ lb., \$8.00.

**Early Paris.**—Well known small variety which usually proves quite satisfactory. Pkt., 5c; oz., 50c; ¼ lb., \$1.75.

**Lenormand's Short Stemmed.**—A late variety of cauliflower. It is of large size and produces well formed heads of excellent quality. Pkt., 5c; oz., 50c; ¼ lb., \$1.75.

## CORN SALAD OR PETTICUS.

**Large Seeded.**—Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

## CRESS.

**Extra Curled or Peppergrass.**—The seed should be sown in drills about 15 inches apart, on rich ground and the plants well cultivated. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c.

**True Water Cress.**—Thrives only when its roots and stems are submerged in water. The seed should be sown along the border of small streams. Pkt., 5c; oz., 25c; ¼ lb., 90c.

## CUCUMBERS.

One ounce will plant 50 hills; two pounds will plant one acre.

Cucumbers succeed best in a rich, loamy soil. For first early, sow in hot-beds, in berry boxes or in small flower pots, six weeks before they can be set out in open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant in open ground in May, about 12 seeds in a hill. When danger of bugs is past thin to four strong plants in a hill. For pickling, plant in June. Sprinkle vines with Slug Shot, to protect from bugs.

**Arlington Improved White Spine.**—This improved strain is pronounced by good judges superior to all others. Fruit even and of good size, straight, well formed and symmetrical. It is of uniform shape, making it unexcelled for pickling. Immensely productive and keeps solid and crisp a long time. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

**Improved Early White Spine.**—Fruit 6 to 8 inches long, remaining green longer than any other variety. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

**Early Frame.**—Early sort for table and pickling, of medium size, straight and handsome. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 90c.

**Boston Pickling.**—Very productive and of superior quality. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

**Improved Long Green.**—An old standard sort, one foot long. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

**Koss' Cream City Pickle.**—Early and very productive, flesh crisp and tender, fruit of dark green color, which they retain as pickles. This variety has been grown from my own special stock. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

**Davis Perfect.**—A grand new variety. Everyone who saw the crop last year says they never saw anything to equal it. Dark, glossy green, slim and symmetrical, with an average length of 10 to 12 inches. They hold color till nearly ripe when they turn white without a yellow streak on them. Quality fine, as seeds are very soft when fit for table use. Very tender, brittle and of exceptional flavor. Early as earliest strain of White Spine; outyields others. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

**Nichol's Medium Green.**—Exceedingly productive, of medium size and always straight and smooth. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

**Japanese Climbing.**—Vines are extra strong, and foliage much more vigorous than other sorts, and from its climbing habit can be grown on trellises, etc., saving valuable space. It is very profitable, 40 to 50 cucumbers having been counted on single plants. Flesh thick and of fine flavor. Good for pickling and slicing. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

**Snake.**—A remarkable and very interesting curiosity. Cucumbers grow curled up like a snake with the head protruding, and some measure 6 feet in length. Grown chiefly as a curiosity and for exhibition. In packets only, each 10c.



Nichol's Medium Green Cucumber.



Improved Early White Spine.



Snake Cucumber.





One ounce will sow 100 feet of drill; 3 or 4 pounds for one acre.

An indispensable root for the farm, deserving of more general cultivation. Well managed, no crop pays better, and most farmers would find an acre or so desirable. A nutritious, succulent food in the winter for cattle, horses, sheep and pigs. For early, sow in spring as soon as the ground can be worked, in drills 15 inches apart, covering one-half inch; thin plants to three or four in. apart in row. For field culture rows should be of sufficient distance to admit use of a horse cultivator; sow seed from middle of April to first of June. A light, sandy loam, deeply tilled, is best; seed is slow to germinate; use care to firm soil after sowing. Average 800 to 1,000 bu. per acre.

**Early French Forcing.**—Valuable for forcing, roots small and of fine flavor. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.40.

**Earley Scarlet Horn.**—Favorite extra early variety. Very early. Orange-scarlet, fine grained and agreeable flavor. Top small, short, stump-shaped root; grows well in shallow soil. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Oxheart, or Guerande.**—Most valuable variety in existence. Intermediate between Half-Long and Horn sorts; diameter 3 to 4 inches at neck; beautiful shape; rich orange color. Easily pulled early as any, of best quality all season. Fine for stock; has yielded 1,200 bu. per acre. Cut tops with scythe and pull roots with potato hooks. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Chantenay.**—As a table variety it is first class; in shape it is larger than the Scarlet Horn and also broader at the shoulder. The flesh is of beautiful rich orange color, and of the finest quality. It is medium early with small tops, and will give great satisfaction to both the market and private garden. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Nantes.**—Half long, stump rooted, color deep scarlet. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Danvers.**—Is in form about midway between the Long Orange and Shorthorn class, growing generally with a stump root. It is of a rich, dark orange color, grows to a large size, is smooth and the flesh very close texture, with little core. It is a first-class carrot for all soils, and it is claimed that under good cultivation it will yield the greatest weight per acre with the smallest length of root of any grown. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Improved Long Orange.**—Desirable for garden or field. Grows to large size, averaging 12 in. in length and 3 in. in diameter at the top. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.

**Large White Belgian.**—Excellent for stock. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.

#### EGG PLANT.

One ounce produces about 1,000 plants.

**Culture.**—Sow the seed in the hot-bed or greenhouse about March 1, transplant to 4 in. apart, and when the plant grows thick, transplant to 8 inches apart. Set in the field about May 20.

**New York Improved.**—Purple in color, large size and good quality. Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00.

**Black Pekin.**—Round in form, solid and quite early. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 75c.

#### ENDIVE.

One ounce of seed to 150 feet of row.

**Culture.**—For early use, sow in May, scattering the seed thinly in drills 10 inches apart, covering it lightly, and for succession every two or three weeks until midsummer.

**Broad-leaved Batavian.**—More productive than others. Forms large heads of broad, thick leaves. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**Green Curled Winter.**—Very hardy, leaves dark green, curly and tender. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

#### GARLIC—KNOBLAUCH.

Plant in rich soil early in spring. Rows one foot apart and about 3 inches in the row. Sets per  $\frac{1}{2}$  lb., 20c; lb., 35c.



## CELERY.

This we consider one of the luxuries of the garden. For first crop sow seed early in hot-beds, or in boxes in the house, in rich, moist soil, covering seed very lightly. For main crop sow in open ground in April or soon as soil is in good condition. Seed germinates slowly, and if the weather is hot and dry protect with light covering of hay or straw. Stir soil as soon as plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly, shear the tops off when about 4 or 5 inches high, and this will make them more stocky. For main crop set plants out between June 15th and July 15th, in rows 3 feet apart and plants 6 inches in the row.

**Golden Self-Blanching.**—This is by far the most popular variety now in the market. It is of medium earliness, of dwarf, compact habit, with thick, solid, heavily ribbed stalks, which blanch easily to a clear waxen yellow. When grown in rich, moist soil, the stalks are numerous and large with a solid heart of beautiful yellow. Pkt., 10c; oz., 80c;  $\frac{1}{4}$  lb., \$2.75; lb., \$10.00.



**Kalamazoo.**—This new distinct variety originated with a prominent celery grower of Kalamazoo, Mich., and is pronounced by those who know it best, "the best perfect type of Dwarf White Celery known." Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Hartwell's Perfection.**—One of the very best sorts for market, owing to its great keeping qualities. Very solid and never hollow. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.50.

**Evans' Triumph.**—This new celery is one of superb quality and one of the best keepers, remaining in condition for use much longer than most sorts. The very large solid stalks are of the finest quality and texture, crisp, brittle, tender and really nutty in flavor. It stands at the head of all late keeping celeries. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.50.

**White Plume.**—Stalks, portions of the inner leaves and heart naturally white, and become fit for use by simply tying up closely with soft twine. More used than any other by gardeners. Our seed highest quality. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Golden Heart.**—Very fine when blanched, the hearts are of rich golden yellow. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.45.

**Crawford's Half Dwarf.**—Color a yellowish white, very attractive. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.40.

**Boston Market.**—A bushy, white, solid, fine market variety. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.35.

**Incomparable Dwarf Crimson.**—Dwarf habit, exceedingly solid, fine, dark crimson color. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.50.

**Soup Celery.**—(Old Seed.) For flavoring. Oz., 5c; lb., 30c.

**CELERIAO or Turnip Rooted Celery.**—Sow seed and treat in first stages of growth as directed for celery. Set in rows two feet apart and six inches apart in the row. As the roots only are used no banking is necessary. When roots have reached a size of two inches in diameter they are ready for use. These are boiled, sliced and eaten with vinegar. To keep through winter, roots should be packed in moist sand or earth.

**Large Erfurt.**—Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.40.

**Large Smooth Prague.**—Round smooth roots, with very few side roots. This is the best and largest variety. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

**Apple Shaped.**—Roots large, smooth and almost round in shape. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.40.



Large Erfurt Celeriac.



## KOHLRABI. Turnip-Rooted Cabbage.

One ounce will sow a drill of about 200 feet.

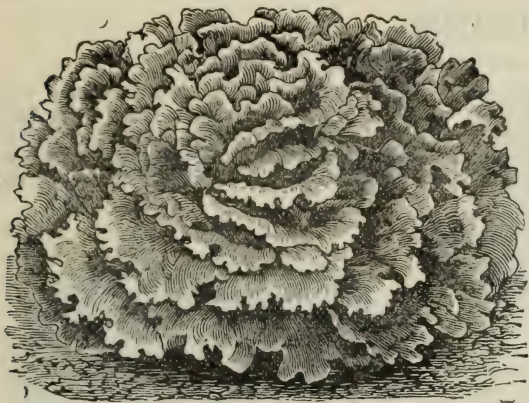
This vegetable is intermediate between the cabbage and turnip. The edible part is an enlargement of the stem and should be used when half grown as when full grown it is tough and fibrous. Sow in drills 18 inches apart and thin plants to 6 or 8 inches apart.

**Early White Vienna.**—The best market variety, tender. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Early Purple Vienna.**—Different from the above only in color. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Large Green.**—Used for feeding stock, bulbs large. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.60.





Prize Head Lettuce.

**Tilton's White Star.**—A great favorite with market gardeners. Superior for forcing as well as outdoor planting, splendid shipper, forms enormously large heads, leaves bright green, thick and crisp. This variety retains its fresh appearance longer than many other varieties. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

**Prize Head.**—Very tender leaves, dark reddish brown. Heads large, of good flavor. We sell more of this than any other brown leaved variety. Always satisfactory. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

**Boston Market.**—Also known by the name of White Seeded Tennis Ball. A very popular variety with the market gardeners. Pkt., 5c; oz., 15c; ¼ lb., 25c; lb., 90c.

**Big Boston.**—This variety resembles the well known Boston Market, but produces heads almost double the size and matures a week later. Endures hot weather exceedingly well. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

**Salamander.**—An excellent all seasons variety, forming good sized heads that stand drought and heat longer without injury than other sorts. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

**Black Seeded Simpson.**—Nearly double the size of ordinary Curled Simpson. Stands summer well without becoming tough or running to seed quickly. By far the most popular variety for greenhouse forcing, making large, handsome heads in a very short time. Gardeners are always pleased with our seed. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

**Deacon Cabbage.**—While this lettuce does not make as large a head as some others, the heads formed are very solid and of excellent flavor, and remain in condition for use as long as any variety in cultivation. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

**All the Year Round.**—Hardy, compact and crisp, with small, close heads. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

**Yellow Seeded Butter.**—Very crisp and tender. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

**Hanson.**—Heads green, with white hearts. Grows to large size and is uniformly sure heading; crisp, mild and tender. One of the finest varieties to grow for market during the summer months. Our stock is unexcelled. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c.

**Boston Curled.**—An excellent early variety for garnishing. Pkt. 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

**Brown Dutch Winter.**—A very hardy sort, medium size, fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.



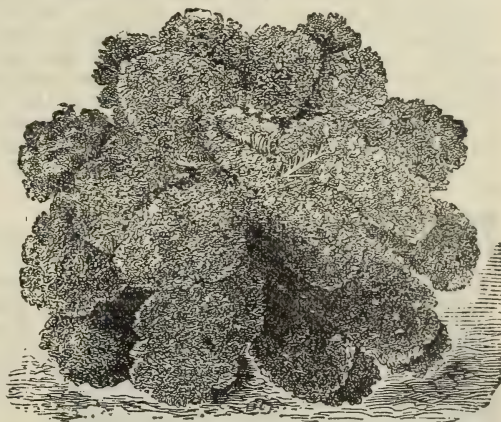
Musselburg Leek.

## LETTUCE.

(One ounce will sow 100 feet of drill.)

No vegetable is more universally used than lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. Quality depends largely upon rapid and vigorous growth. Sow in hotbed in March and in open ground as early as it can be worked, thinly in drills one foot apart. For succession, sow every three weeks during season. Thin out plants as they grow.

**Grand Rapids.**—There is nothing superior, if it has an equal, for growing under glass. It requires less care, will grow more weight in the same place, is not as liable to rot, and will keep longer without wilting than any other variety. Is of fine appearance, crisp and tender. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.



Kale or Borecole.

## KALE OR BORECOLE.

Sow in prepared beds, middle of April to beginning of May and transplant beginning of June, same as cabbage. All the varieties are very hardy, and are best when touched with frost. One ounce to 1,500 plants.

**Tall Green Curled Scotch.**—Finely curled, one of the best sorts. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

**Dwarf German.**—Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

## LEEKS.

One ounce will sow a drill about 100 feet.

Leeks are quite appetizing when sliced and served as a salad or they can be cooked and served like onions. Sow seed thinly in drills early in the spring; thin out so as to stand six inches apart in the row. Early in the fall draw earth up about the stems as you would to blanch celery.

**Large London Flag.**—Hardy, strong growing plant, with broad leaves. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50.

**Musselburg.**—The favorite market variety. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50.



## MUSKMELONS.

One ounce for 60 hills; 2 to 3 pounds in hills for an acre.

The soil best adapted to melons is a warm, rich, sandy loam. Plant in hills five or six feet apart each way, ten or twelve seeds in a hill. When they begin to vine, thin out, leaving only four of the most thrifty. As melons are very sensitive to cold, they should not be planted until the settled warm weather begins—in this latitude about the middle of May. Cultivation should commence as soon as the plants appear above the ground, and be kept up once a week until the vines interfere too much. You will be pleased with our seed.

**Tip Top.**—A melon I recommend to every lover of this luscious fruit and to every gardener who grows for the market. It is yellow fleshed and of the very best quality. Every melon produced, big or little, early or late in the season, is a good one. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.

**Paul Rose.**—Is a decidedly new and meritorious variety that is bound to please all classes of melon producers. It is a large "Netted Gem," with deep orange flesh, secured by crossing with the Osage. It is a great producer of extra fine quality melons; as early as the Gems and equally as good a shipper. A good variety for the large grower and equally as good for the small grower for home use. True seed is very scarce this season. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.

**Emerald Gem.**—This is undoubtedly the finest in flavor of all varieties of muskmelon. It is also the earliest to ripen, and while too soft to stand shipping any great distance to market, it is unequalled for home use or nearby markets. Vines of strong, vigorous growth and very prolific. If fruits are gathered as soon as they ripen, the vines will continue in bearing throughout the season. The melons are rather small and flattened at both ends. The skin is a rich, deep emerald green, smooth and free from netting. The fruits are heavily ribbed, with narrow bands of lighter green between the ribs. Flesh very thick, with thin rind and small seed cavity, crystalline in appearance, and of a rich salmon color. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.10.

**The Princess.**—The most delicious melon. The flesh is of a rich, salmon color, very thick and sweet. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**Osage.**—One of the best melons for family use and also greatly liked by gardeners. Flesh is salmon color, remarkably sweet and spicy in flavor, extremely thick and delicious to the rind. Seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy, owing to the thickness of the meat. It is of medium size, oval, slightly ribbed. Skin is thin, of dark green color and covered more or less with shallow netting. We have taken a great deal of pains to develop the thick, deep, rich colored and fine flavored flesh of this sort, and a careful comparison proves it to be unequalled. All lovers of fine melons should try the Osage. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.



**Hackensack.**—Deeply netted, very large and productive. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**Netted Gem or Rocky Ford.**—This has become one of the most popular of small or basket melons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and high flavored. I offer an exceptionally fine stock of this sort, the fruit being wonderfully uniform in shape and quality. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

**Grand Rapids.**—The earliest large muskmelon. A new, extra early, yellow fleshed sort of a handsome shape. It is a most profitable variety to the gardener on account of its size, attractive appearance and its extreme earliness. Its flavor is not as good as that of the Osage or other standard melons, but it is ready for market before any other large variety can be picked, and that fact insures ready sales. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

### MUSTARD.

A pungent salad, used with cress or for greens. Sow thickly in rows, cut when about 2 inches high. One ounce will sow about 75 feet of drill.

**White London.**—Best for salads. Oz., 5c;  $\frac{1}{4}$  lb., 10c; lb., 30c.

**Brown.**—More pungent than the white. Oz., 5c;  $\frac{1}{4}$  lb., 10c; lb., 30c.

### MUSHROOMS.

**Mushrooms.**—The ease and certainty with which a crop of mushrooms can be grown to perfection in any ordinary house cellar, woodshed or barn, and the astonishing success of so many who have taken up this new industry, both for profit and their own use, induces us to call especial attention to the subject. The great luxury of mushrooms can be enjoyed by all at a trifling expenditure of money, time and labor. We recommend our Pure Culture American Mushroom Spawn as generally the better, both for the market gardener and the private planter. Per brick, 25c; 10 bricks, \$2.00; by mail, per brick, 45c.



Paul Rose Muskmelon.

### SLUG SHOT.

kills the

MELON BUG.

5 lbs. 30c, 10 lbs. 50c.



## WATERMELONS.

One ounce for 50 hills; 4 to 5 pounds will plant an acre.

A light, sandy soil, with good exposure to the sun, is the best for watermelons. It should be prepared deep, but receive shallow cultivation. Hoe often and thoroughly. Plant in hills 8 to 10 feet apart each way. Plant 8 to 10 seeds in a hill, and finally, when danger of insects is past, leave but three strong plants. Thousands of melon growers depend on us annually for their seeds and are universally pleased, claiming that nowhere have they ever obtained seeds so pure and reliable. It pays to have the best. Packets contain about 100 seeds.

**Cole's Early.**—Decidedly the finest early variety for the private garden, but is too brittle for long shipments. It is very early and will mature farther north than most other sorts. Of medium size, very productive, continuing to bear throughout the season. Flesh of bright red color, of granulated sparkling appearance. In flavor lusciously sweet and refreshing. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

**Sweetheart.**—A favorite market sort. Early, large, handsome, heavy, good shipper, long keeper, bright color and of good quality. Vines are vigorous and productive, ripening the fruit early. The fruit is large, oval, very heavy, uniformly mottled light green and dark green; rind thin but firm. The flesh is bright red, firm, solid, but very tender, melting and sweet. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

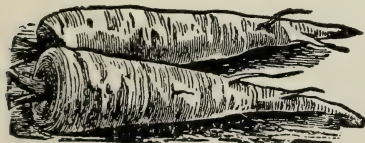
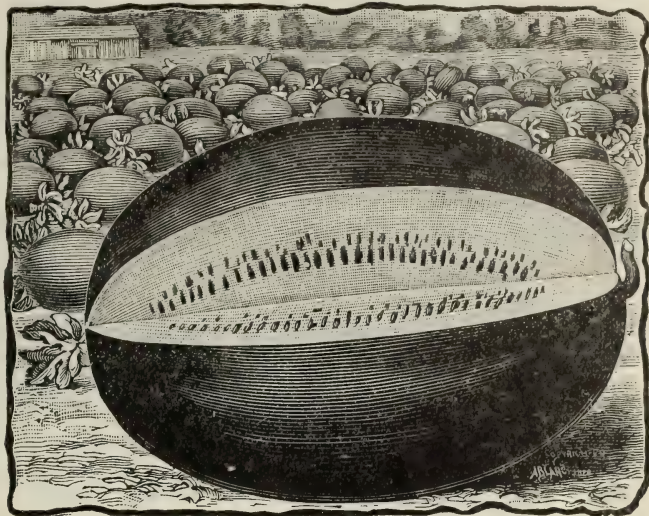
**Kolb's Gem.**—Large, delicious and an excellent keeper. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Citron.**—(For preserves). Small, round fruit, makes a beautiful clear, nearly transparent preserve of fine flavor. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Dixie.**—This melon has excellent merits and I can recommend it to my customers as the best shipping melon grown, being even larger, earlier and far more productive than the Kolb's Gem, which has heretofore been considered the best melon for shipping. Another very important point is the productiveness, having six to eight large melons on a vine. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Cuban Queen.**—Flesh bright red, skin striped. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 50c.

**Mountain Sweet.**—Fruit large, dark green, rind thin, flesh hard, solid and very sweet. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.



## PARSNIPS.

(One ounce will sow 200 feet of drill. Five pounds will sow an acre in drills.)

Sow early in spring in good, rich soil, which has been plowed deep, in drills 15 inches apart, covering half an inch. Thin to 5 or 6 inches apart in rows. They are improved by frost.

**Guernsey**—(Improved half long). The roots do not grow so long as those of the Hollow Crown, but are of greater diameter and

more easily gathered. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

**Long Smooth or Hollow Crown.**—Smooth and large, very tender and sugary; best for general use. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

**OKRA, OR GUMBO.** One ounce will sow about 80 feet of drill.

Why not try OKRA this year? It is extra nice for soups, stews, etc., and also much liked when pickled. Sow at the usual time of tender vegetables in drills 2 inches deep, leaving the plants 2 to 3 feet apart. Pick pods while still tender and slice crosswise before cooking.

**Dwarf White.**—Early and very productive. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 45c.

**White Velvet.**—The pods of this variety are round and perfectly smooth and not ridged like other Okras. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**PEPPER.** (One ounce will produce about 1,800 plants.)

Sow seed in hot-bed early in spring; transplant to open ground when the weather is favorable, in warm, mellow soil, in rows 18 inches apart. Seeds germinate slowly and require considerable heat.

**Neapolitan.**—Decidedly the earliest of all large mild red peppers, and the most productive of all large peppers. Plants completely laden with large handsome fruits and bear continually until frost. Of considerable value to market gardeners and pickling establishments. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Large Bell or Bull Nose.**—Early, mild and pleasant to the taste. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c.

**Ruby King.**—Large and handsome, remarkably mild. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.

**Long Cayenne.**—Long, red, hot and pungent; dwarf growth. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c.

**Chinese Giant.**—Most gigantic of all Giant Peppers. A fine mild red pepper of enormous size, magnificent appearance and brilliant, glossy scarlet color. The flesh is mild and unusually thick. Makes an excellent salad sliced and served like tomatoes. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 80c.





A strong, deep, rich and loamy soil is most suitable for this crop. The ground should be heavily dressed with well-rotted manure, and plowed a moderate depth, taking a narrow furrow in order to more thoroughly mix the manure with the soil, if possible, the plowing should be done in the fall. As early in the spring as the ground is in working order, harrow it thoroughly and make as fine a level as possible; sow thinly in drills one-fourth inch deep and twelve inches apart. Keep the surface of the ground open and free from weeds, but do not ridge up to the growing bulbs. One ounce will sow one hundred feed of drill; 4 to 5 pounds per acre.

**Extra Selected Yellow Globe Danvers.**—The finest shaped, best colored and largest cropper of any of the yellow onions, and not to be compared with the ordinary stock of Yellow Globe Danvers. Its point of superiority over the ordinary Yellow Danvers are earliness of ripening, smallness of neck, perfect globe shape and uniformity of shape and color. It is an immense cropper and will yield more marketable onions to the acre than any strain ever tried. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.65; 5 lbs., \$8.00

**Yellow Globe Danvers.**—Ordinary stock. The most popular onion all over the country. Excellent quality, mild flavored, very productive, ripens early, good keeper. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.40; 5 lbs., \$6.25.

**Yellow Danvers.**—Differing from the Globe strain only in shape, being more flat. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.15; 5 lbs., \$5.00.

**Large Red Wethersfield.**—The standard sort throughout the west; the most hardy and immense crops can be raised when more tender sorts are not profitable. Growers who prefer the red varieties will find this magnificent strain far surpassing the ordinary Red Wethersfield in size, productiveness and keeping qualities. Of finest form, skin deep purplish red, flesh purplish white, finer grained than many of the red sorts. Our seed of this is extra select and cannot be excelled. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.40.

**Southport Red Globe.**—This is a very handsome variety and is deserving of general cultivation. It is medium early (none of the perfectly globe-shaped onions are as early as the flat varieties), grows to a large size, skin deep red, flesh fine grained, mild and tender. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.75.

**Southport White Globe.**—The handsomest market variety; beautiful, clean, pure, silvery white bulbs of large, even size, globe-shape, mild and pleasant flavor, and outsells every other variety. Undoubtedly the best white sort. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 65c; lb., \$2.35.

**White Portugal or Silver Skin.**—Standard white variety for general culture. Bulbs grow to good size, ripening early and quite evenly. A good keeper. Flesh is very mild and sweet; the skin a clear, silvery white, of very handsome appearance. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Southport Yellow Globe.**—A handsome variety of large size. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.40.

**Extra Early White Pearl.**—A very fine new Italian variety that grows quickly to a good marketable size. The bulbs are round, flattened with a delicate, pure white skin. Flesh very mild and pleasant in flavor. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; lb., \$2.00.

**Mammoth Red Pompeii.**—Grows to an enormous size; single onions often weighing from 4 to 5 lbs.; skin pale reddish-brown, flesh white, fine grained, very mild and tender. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.75.

**VEGETABLE GARDENING.** By Prof. Samuel B. Green, a prominent authority on the growing of vegetables for home use and the market. Treats on tillage, implements, seed growing, greenhouses, insects and how to destroy them; complete classification of vegetables with instructions for growing. A complete, practical guide to gardeners. 256 pages. Illustrated. Paper 50c, cloth \$1.00, postpaid.





## ONIONS—Continued.

**Mammoth Silver King.**—Of attractive shape, with silvery white skin and flesh of a most agreeable mild flavor. It matures quite early and reaches a much larger size than any other of the flat white varieties; frequently measuring twenty inches in circumference, and weighing from three to five pounds when well grown. They must be sown thinly to produce large onions. We do not hesitate to recommend it as one sure to please the grower. True American grown seed. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 50c; lb., \$1.65.

**White Queen.**—A rapid grower, white skin, early and excellent for pickling. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; lb., \$1.30.

**Australian Brown.**—A new onion of real merit. The bulb develops very early from seed, and will keep longer than any other onion. It is of medium size, extremely solid, tender, crisp and mild-flavored. The skin is a beautiful amber-brown, and is very attractive. My seed is true to name and of thoroughly acclimated stock. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.



White Queen Onion.

**Prize Taker or Spanish King.**—A globe-shaped variety of recent introduction, remarkable for its enormous size, many specimens reaching the weight of three and one-half pounds each. The skin is of a bright straw color, flesh white, very thick, and of mild flavor. Earliness, uniform shape, productiveness and its long keeping qualities have made the Prize Taker a valuable acquisition. It is today one of the largest, handsomest and most profitable variety grown. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.40.

**Extra Early Flat Red.**—A variety of unusual early maturity, medium size and of a deep red color. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb., \$1.60.

## ONION SETS.

Indispensable for early onions for bunching, as in a very few weeks they are ready for the table. While it is much cheaper to grow onions from seed, still it is considerable work to keep them weeded, and many of our customers, who have only a small garden, prefer to grow them from the sets, and gardeners plant sets for the early market. Prices subject to change.

**White Bottom Sets.**—White onion sets grown from seed are the most popular and best for early use and large onions. Pt., 10c; qt., 15c; peck, 75c; bu., \$2.00.

**Yellow Bottom Sets.**—Like the White, except color. More used than any other kind. Pt., 10c; qt., 15c; peck, 65c; bu., \$2.00.

**Red Top or Button Sets.**—Still largely called for in some sections. Pint, 10c; qt., 15c; peck, 75c; bu., \$2.50.

If by mail add 6c per pint and 10c per quart to the above prices.

Write for special prices on larger quantities.

## CHIVES. SCHNITTLAUCH.

Chives are very hardy and perennial members of the Onion family. They are grown exclusively for their tops. Planted in clumps in any garden soil, they grow readily, and increase so as to render a division necessary. The tops appear very early in spring and can be cut throughout the season. Per clump, 15c; by mail, 25c.



Onion Sets.

## PARSLEY.

One ounce will sow 150 feet of drill.

**Culture.**—Sow early in spring in drills 14 inches apart, and thin to 6 or 8 inches. Cover half an inch deep.

**Extra Curled Emerald Dwarf.**—Dwarf, with bright green leaves finely cut and curled; very ornamental. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

**Champion Moss Curled.**—The leaves are very finely curled and moss-like. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 90c.

**Plain Leaved.**—Hardier than the curled varieties. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

**Hamburg or Turnip Rooted.**—The roots are used for flavoring. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 30c; lb., \$1.00.

## RHUBARB or Pie Plant.

One ounce will produce about 100 plants.

Succeeds best in deep, rich soil. Sow in spring in drills, cover one inch. Thin plants to six inches apart. Transplant in autumn or spring to permanent beds three feet apart each way.

**Victoria.**—The standard variety. Large and tender. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.15.

**Roots.**—10c each, \$1.00 per dozen, by express.





## GARDEN PEAS. Carefully Selected and Hand Picked.



This vegetable is so much more delicious when freshly gathered than when allowed to shrivel for days in the market, that every family should make it possible to grow their own peas. The smooth varieties are earliest and most hardy. The wrinkled varieties are the sweetest.

One quart will plant about 100 feet of drill; 2 to 3 bushels per acre.

Peas mature quickest in light, dry soil, not too rich. May be sown as early as the ground can be worked, and for a succession every two weeks up to July, or what is better, select several kinds which will form a succession in maturing. Sow in drills two to four feet apart, according to varieties, and 3 to 4 inches deep for general crop, although the first earlies will come to maturity sooner if only covered 1½ inches. Wrinkled sorts are marked \*. They should be sown thicker in the row than the smooth varieties, as they are more liable to rot if the ground is wet.

**Alaska.**—Height 2 feet, pods rather small, dark green color, well filled; the earliest pea known, being two days earlier than the First and Best, and ninety per cent of the pods can be gathered at the first picking. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75; bu., \$6.75.

**Koss' Extra Early Market.**—Unequaled for excellence, yield, size of pod and regularity of growth. Emphatically the pea for market gardeners and truckers. It is a wonderful bearer, produces pods of good size, which ripen so evenly as not to require more than two pickings to clear off the crop. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75; bu., \$6.75.

**\*Thomas Laxton.**—Very similar to Gradus, but in my opinion a little better. The vine is a trifle shorter and the pods a little better shape, being square ended and very heavy. It is very early for a wrinkled pea and very large. Quality extra good. If you have a market that will pay an extra price for high quality and large pods it would pay you to try this pea. Pkt., 10c; pt., 25c; qt., 45c; ½ peck, \$1.50; peck, \$2.75; bu., \$10.00.

**\*Gradus, or Prosperity.**—One of the finest for family use. This remarkable pea is not only large and of the best quality, but it is nearly or quite as early as the small round, extra early sorts. It is a wrinkled pea with vine growing about 30 in. high. The pods are of a bright green color and measure 4 in. or more in length, and are well filled with luscious peas—8 to 10 or more in a pod. Of the highest table quality and retain in a remarkable manner their color and attractive appearance after cooking. A grand pea in all respects. Pkt., 10c; pt., 25c; qt., 45c; ½ peck, \$1.50; peck, \$2.75; bu., \$10.00.

**\*Nott's Excelsior.**—A superb new variety, and we are sure our customers will welcome it as an ideal family garden pea. It is fully as sweet and delicious as the American Wonder and grows one-half taller. Pods are larger and it is far more productive than the Premium Gem, and it is within a day or two as early as the first early smooth peas. Mr. Geo. Buchanan writes: "I found these peas a very distinct, pure sort, with many marked excellencies over the American Wonder, Premium Gem, Advancer, etc. The peas were ready for table use within forty-three days from planting." Quality very superior. Pkt., 10c; pt., 20c; qt., 35c; peck, \$2.00; bu., \$7.50.

**\*American Wonder.**—Popular extra early variety for family garden. Cannot be planted quite as early as smooth sorts; will not stand as much cold, wet weather, but is far superior to them in flavor and table qualities. Dwarf, robust habit, growing about 10 inches high; produces a profusion of good-sized, well-filled pods of the fine flavored peas. Pkt., 10c; pt., 20c; qt., 35c; ½ peck, \$1.10; peck, \$2.00; bu., \$7.50.

**\*McLean's Little Gem.**—A dwarf, prolific, green wrinkled variety, early. Pkt., 5c; pt., 20c; qt., 35c; peck \$2.00; bu., \$7.50.

**Tom Thumb.**—Very dwarf and early, of excellent quality, yields abundantly. Pkt., 5c; pt., 15c; qt., 30c; peck, \$1.75; bu., \$6.00.

**\*Horsford's Market Garden.**—A most prolific bearer, pods medium size, numerous and well filled with peas of delicious flavor. Somewhat later than the Little Gem. Pkt., 5c; pt., 20c; qt., 35c; pk., \$2.00; bu., \$7.50.

**Dwarf Sugar, Edible Pods.**—Early, used like snap beans or shelled. Pkt., 5c; pt., 20c; qt., 35c; peck, \$2.40.

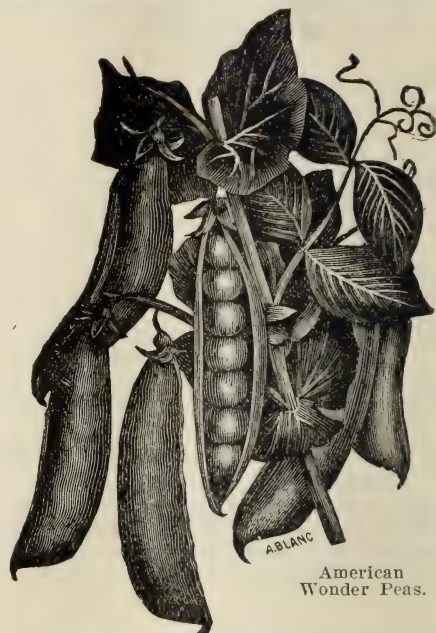
**\*Telephone.**—Immensely productive; finest quality; excellent, sugary flavor; vines very strong. Pods of large size, with 6 or 7 large, delicious peas; height 4 ft. Pkt., 10c; pt., 20c; qt., 40c; ½ pk., \$1.25; pk., \$2.25; bu., \$8.00.

**\*Juno.**—The best wrinkled main crop pea in the market today. Vines robust in growth, pods stout, straight and usually borne in pairs. The pods are thick and well filled with delicious, large, sweet, dark green peas of the finest quality. Pkt., 10c; pt., 20c; qt., 35c; pk., \$2.00; bu., \$7.50.

**\*Improved Stratagem.**—Late variety for family or market use. Half dwarf, vigorous, branching habit, and under favorable conditions an enormous cropper. Pods are long and filled with 7 to 9 large peas of extra fine quality. Pkt., 10c; pt., 20c; qt., 35c; ½ pk., \$1.10; pk., \$2.00; bu., \$7.50.

**\*Champion of England.**—One of the richest, best flavored peas grown. Pkt., 5c; pt., 20c; qt., 35c; ½ pk., \$1.10; pk., \$2.00; bu., \$7.50.

**Black Eyed Marrowfat.**—Excellent for either garden or field culture. Pkt., 5c; pt., 15c; qt., 25c; peck, \$1.25; bu., \$4.50.



American Wonder Peas.



## PUMPKIN.

One oz. will plant 35 hills; 4 lbs. will plant 1 acre.

The best, most enterprising and most prosperous farmers put in a crop of pumpkins every year. They can be grown separately or with corn or potato crop, and do not seem to interfere in the least. They are valuable for feeding to stock, and what is a fair without pumpkins, or a Thanksgiving dinner without a pumpkin pie? Planted with corn, 2 lbs. will plant 1 acre.

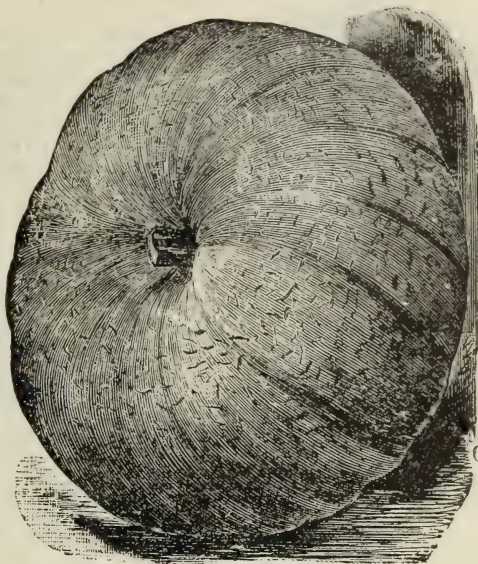
**Calhoun, or Thanksgiving Pie.**—A great improvement on the Large Cheese. Color creamy brown, flesh deep salmon yellow, fine grained; seed cavity is very small; rind thin. When cooked it is very yellow and makes pies of a rich color, sweet and of the finest quality. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 70c.

**Large Cheese.**—Flat shaped, flesh yellow, fine grained and sweet. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.

**Mammoth Tours.**—Is also called "Mammoth Whale." Grows to an immense size, sometimes 3 feet in length, and to a weight of 100 to 200 lbs. Flesh of a salmon color. Seed of a peculiar shape. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; lb., 90c.

**Jonathan.**—This is one of the finest varieties ever introduced; a good keeper, large size, very sweet and finest of all for pies. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 65c.

**Connecticut Field.**—Standard sort for field culture. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 35c; 3 lbs., 90c.



Mammoth Tours Pumpkin.

## SALSIFY.

**Vegetable Oyster.**—One ounce will sow 50 feet of drill, 8 lbs. to acre.

Why don't you grow Salsify? It is one of the most delicious and nutritious of vegetables, and should be more generally cultivated for use in winter, when the supply of really good vegetables is so limited. It has the true oyster flavor and makes a delicious and inexpensive substitute for them in soup, etc. Cultivate like parsnips.

**Mammoth Sandwich Island.**—Average fully double size of old Long White. Roots are white, smooth and, notwithstanding their enormous size, of superior quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.10.

**Large White.**—Standard variety. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb. 85c.

**Scorzonera, or Black Oyster Plant.**—Treatment same as Salsify, which it closely resembles, except that the skin is black. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; lb. \$1.60.



## SPINACH.

One oz. will sow about 80 feet of drill; 10 lbs. to the acre.

This is the finest "greens" of any plant in cultivation. For summer, sow early in spring in deep, rich soil, in drills 1 foot apart; cover 1 inch. Sow at intervals of two weeks throughout the season. For very early spring-use, sow the winter varieties first of September, and protect by covering with straw.

**Long Standing.**—Standard with gardeners. Leaves thick, fleshy and crumpled; slow in running to seed; leaves round, large and of a dark green color. Pkt., 5c;  $\frac{1}{4}$  lb., 10c; lb., 25c; 5 lbs., \$1.00.

**Round Leaf.**—Excellent market sort, equally good for spring or fall sowing; leaves large, thick and fleshy. Pkt., 5c;  $\frac{1}{4}$  lb., 10c; lb., 25c; 5 lbs., \$1.00.

**Victoria.**—Distinguished by exceedingly dark, black-green color and for its very long standing qualities, being two or three weeks later than the ordinary varieties. Leaves are thick and spread out flat upon ground. Excellent for spring sowing, but not sufficiently hardy to withstand winter in this locality. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 15c; lb., 25c; 5 lbs., \$1.00.

**Bloomsdale Savoy Leaved.**—The leaves are wrinkled like Savoy Cabbage. Pkt., 5c;  $\frac{1}{4}$  lb., 10c; lb., 25c; 5 lbs., \$1.00.

**Prickly Seeded.**—Triangular, arrow shaped leaves, one of the hardiest and generally used for fall planting. Pkt., 5c;  $\frac{1}{4}$  lb., 10c; lb., 25c; 5 lbs., \$1.00.

## TOBACCO.

**Connecticut Seed Leaf.**—Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.

**Imported Havana.**—Pkt., 10c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20.



Victoria Spinach.



## RADISH.



Early Scarlet Globe  
Radish.

One oz. will sow 100 ft. of drill; 8 to 10 lbs. will sow 1 acre in drills.

Radish seed should be sown in light, rich soil as early as the ground can be worked, and for a succession, at intervals of two weeks until midsummer. Radishes must be grown quickly and have plenty of room or they will invariably be tough and pithy. Sow in drills 1 foot apart and thin to 2 or 3 inches apart as soon as the rough leaves appear.

**Crimson Giant.**—The most profitable variety for market gardeners, and may well be considered the most valuable new variety which has been sent out for many years. It is a rapid growing sort, developing roots of beautiful, deep crimson color, perfect shape and more than double the size of any other forcing variety. The old standard sorts, such as Rosy Gem and Scarlet Globe, usually measure from 2 to 3 inches in circumference at the time of marketing, while the Crimson Giant forms roots 6 to 7 inches in circumference without getting pithy or hollow, and they retain their firmness and tenderness of flesh. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

**Early Scarlet Globe.**—A most excellent radish for garden culture, and for hotbed forcing there is no variety so desirable as the Early Scarlet Globe. It is the earliest; its color is the handsomest; in flavor it is the mildest, most crisp, juicy and tender. It is the market gardeners favorite as a forcing radish. It forms small top and will stand a great amount of heat without becoming pithy. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

**Ne Plus Ultra.**—Remarkably fine in quality, of very quick growth, and ready to pull within 20 days after sowing. Perfectly globular little roots, of very bright color and excellent shape; certain to insure ready sale on the market. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

**Extra Early Scarlet Turnip, Forcing.**—Of medium size, bright scarlet; quality superior. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 60c.

**White Tipped Scarlet Turnip (Rosy Gem).**—A most popular and attractive variety, a great favorite in many large markets. The radish is bright scarlet with white tip, and of a beautiful shape; flesh white, crisp and finely flavored. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.

**Early Scarlet Turnip.**—A very early variety, deserving general cultivation on account of its rich color and crisp, tender flesh. Very desirable for early outdoor planting, as well as forcing. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**French Breakfast.**—A quick growing, medium sized radish, oblong in shape; color a beautiful scarlet, except the tip, which is pure white. A splendid variety on account of its excellent quality and attractiveness. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**White Summer Turnip.**—A well known standard sort. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.

**Gray Summer Turnip.**—Excellent for summer use, mild. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 55c.

**Yellow Summer Turnip.**—Withstands the heat and drought of summer well. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Long White Vienna, or Lady Finger.**—Skin and flesh pure white, mild, sweet, crisp, brittle, of quick growth. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Long Scarlet, Short Top.**—The long, slender, handsomely colored roots are most attractive in appearance. They are ready in about 25 days; crisp, brittle and of choicest quality. They attain a length of 5 to 6 inches, growing half out of the ground. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Chartier.**—It is one of the very best varieties for growing outdoors. Roots are in good condition for the table very early and continue hard and crisp until they reach a diameter of about  $1\frac{1}{4}$  inches, thus affording good roots for a very long time. The roots are long, cylindrical and scarlet-rose in color, and gradually taper to a point and shade into white at the tip. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**White Strasburg.**—This grows to the largest size and is usable when quite small, thus covering a long season. The mature roots are 4 to 5 inches long and about 2 inches thick, very white; the flesh is exceedingly crisp and tender. One of the best of the large summer sorts. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Rose China Winter.**—Form conical, very smooth and of a bright rose color. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Long White Spanish.**—Root long, top-shaped, retaining the same diameter for two-thirds of its length, sharply conical at the base, and when full grown measuring 7 or 8 inches in length and about 3 inches in diameter. Flesh white, solid and pungent. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Round Black Spanish.**—Roots round, sometimes top-shaped, 3 to 4 inches in diameter; skin black, flesh white, very compact and highly flavored. An excellent sort for winter, as the roots keep a long time. Pkt., 5c; oz., 10c; 2 oz., 15c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Long Black Spanish.**—One of the latest as well as the hardiest of the radishes, an excellent sort for winter use. Roots oblong, black, of very large size and firm texture. Pkt., 5c; oz., 10c; 2 oz., 15c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

**Mixed Radishes.**—Superb mixture of all kinds of radishes, early, medium, fall, winter, etc. Sow a row of it and it will furnish you delicious radishes throughout the year. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.



White Strasburg Radish.



## SQUASH.

One ounce early varieties will plant about 40 hills; 1 oz. late will plant about 20 hills; 3 to 4 lbs. to the acre.

Plant about the middle of spring in hills, the early sorts 4 to 6 ft. apart, the late varieties 8 to 12. Thin to 3 plants in the hill. The soil cannot be too rich. Use Slug Shot to kill the bugs.

**Hubbard.**—The leading squash for fall and winter use; hard skinned, flesh dark yellow, fine grained, dry, sweet, rich. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 90c.

**Warty Hubbard.**—This new strain of the Hubbard is an improvement. The wartiness indicates a very hard shell, which is one of the best features of a long keeping squash. It also denotes extra choice quality; the harder and more warty the shell of a Hubbard, the more delicate and sweet the flesh. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 90c.

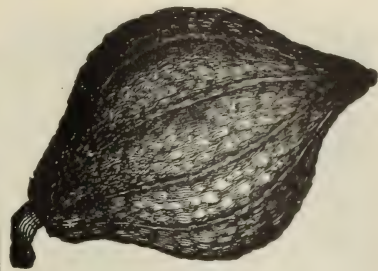
**Sibley.**—An excellent variety, flesh solid, thick and richly colored. Ripens about the same time as the Hubbard. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 75c.

**Summer Crook Neck.**—Early, productive and of good quality. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 65c.

**Marble Head.**—A very good winter squash, similar to the Hubbard. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 85c.

**White Bush Scalloped.**—Light cream color, large, flat, scalloped shaped, early. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 65c.

**Boston Marrow.**—A winter variety of excellent quality. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 25c; lb., 65c.



Hubbard Squash.

## TOMATOES.

One ounce will produce about 1,200 plants.

Sow early in hotbeds or seed boxes, and when plants have four leaves transplant to 4 or 5 in. apart. Give plenty of air and endeavor to secure a vigorous growth. When all danger of frost is past, transplant to open ground, 4 to 6 feet apart each way. Well manured, light, sandy soil is best, but it must be remembered that a surplus of manure stimulates leaf growth to the detriment of fruit.



**Spark's Earliana.**—This is the earliest smooth, bright red tomato of good size now in cultivation. Plants are quite hardy, with rather slender open branches and moderate growth, well set with fruits, nearly all of which ripen very early in the season. The tomatoes are deep scarlet, generally smooth and grow in clusters of five to eight, averaging  $2\frac{1}{2}$  inches in diameter. Flesh deep red and of slightly acid flavor. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Atlantic Prize.**—Comes in advance of such standard kinds as Acme, Beauty, etc. It bears in clusters, is of good size, smooth, round and of fine scarlet color. Choicest seed from specimen fruits. Pkt. 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.

**Buckeye State.**—A fine, new, extra large Livingston sort, nearly one-half larger than Beauty, deep color, smooth, heavy and of splendid quality. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Bond's Early Minnesota.**—Most of the extra early varieties are irregular in shape; this is always round and smooth. Vines vigorous, with rather small leaf; fruit of medium size, of good shape and dark red color. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Stone.**—Vine vigorous and productive. Fruit round, apple shaped, large, very deep red in color and astonishingly heavy. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Dwarf Champion.**—Its habit of growth is peculiar, for not only is it dwarf and compact, but the stem is thick, stiff and short-jointed; it is actually self-supporting when laden with fruit. The fruit is of a purplish ink color, always smooth, and the flesh solid and of fine quality. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 75c.

**Yellow Plum.**—Good for preserving and pickling, plum shape, solid and smooth. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 70c.

**Acme.**—Early, medium size, very solid and productive, dark red, slightly tinged with purple. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

**Livingston's Beauty.**—A very fine variety of large size, grows in clusters of four or five. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c.



Acme Tomato.





Early Purple Top Munich Turnip.

July 15 to Aug. 15. Swedes from June 15 to July 15.

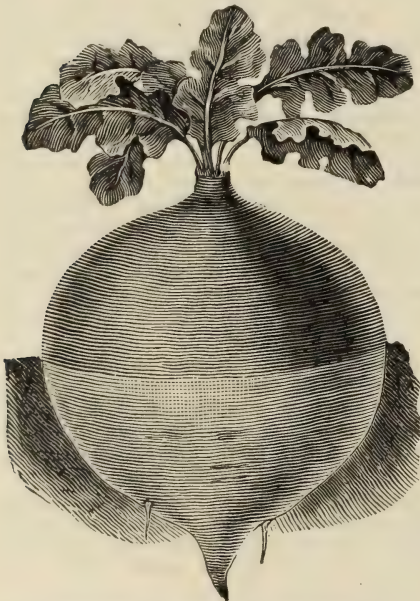
**Extra Early Purple Top Milan.**—One of the earliest sorts in cultivation. Bulb very flat, medium size, quite smooth, with a bright purple top; leaves few, short and of light color; growing very compact and making exceedingly small strap-leaved top. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

**Early Purple Top Munich.**—A German variety, remarkably handsome, very early, with purplish red top, flesh snow white and of fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

**Red Top White Globe.**—Similar to the Purple Top Strap Leaved, except shape. The largest yielder of any turnip on the list and always brings top of market price. Desirable for table use or for stock. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**Pomeranian White Globe.**—This is a free growing, rough leaved sort, useful for both table and stock. It is not quite so rapid in growth as the flat varieties, may be expected to come in as a succession in autumn and is admirable for table use in early winter. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**White Egg.**—A quick-growing, egg-shaped, perfectly smooth, pure white variety with small top and rough leaves. Flesh very sweet, firm and mild, never having any rank, strong taste. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.



Imperial Hardy Swede Rutabaga.

## TURNIPS.

One ounce for 150 feet; 2 lbs. to the acre.

**Culture.**—For early use, sow the small sorts as soon as the ground can be worked in the spring, in drills 14 inches apart. Rutabagas 30 inches. Thin plants of early varieties to 6 inches apart, and the Swedes to 1 ft. apart. For fall and winter use, the early kinds should be sown from



**Yellow Aberdeen.**—Hardy and productive, good keeper, color pale yellow. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**Early Flat White Dutch.**—Standard variety, good marketable size, pure white, small top, with but few strap-shaped leaves. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**Long White, or Cow Horn.**—This variety is carrot-like in form, growing nearly half out of the ground and generally slightly crooked. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**Purple Top Strap Leaved.**—The standard for this part of the country for late planting, and we sell immense quantities of it every year. One of the best table and stock sorts on the market, being fine grained and of mild flavor. Of good size, flat shape, pure white below with purplish red top. Good cropper and excellent keeper. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

### RUTABAGA (Swedish Turnip).

Largely grown in the northern states and Canada for stock feeding, and for this purpose they are superior to turnips. Sow in drills 2 feet apart and thin out to 8 inches in the row.

**Imperial Hardy Swede.**—Flesh orange yellow, of firm texture, very sweet, mild and well flavored. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

**White Sweet German.**—Large size, oval form and very solid, flesh pure white and sweet. This is the best keeping variety. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

**Skirving's Improved Purple Top.**—A very popular variety; flesh firm, yellow, sweet and finely flavored. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

### SWEET, POT AND MEDICINAL HERBS.

Herbs in general love a mellow and free soil. The chief points are to cut them on a dry day, when not quite in full bloom, and to dry them quickly in the shade, and when dry pack close in dry boxes, keeping them entirely excluded from the air.

	Pkt.	Oz.		Pkt.	Oz.
Anise. . . . .	5c	10c	Marjoram, Sweet . . . . .	5c	20c
Basil, Sweet . . . . .	5c	15c	Rosemary. . . . .	5c	35c
Caraway. . . . .	5c	10c	Sage. . . . .	5c	15c
Coriander. . . . .	5c	10c	Saffron. . . . .	5c	15c
Dill. . . . .	5c	10c	Savory, Summer . . . . .	5c	15c
Fennel. . . . .	5c	10c	Thyme. . . . .	5c	35c
Horehound. . . . .	5c	20c	Wormwood. . . . .	5c	20c
Lavender. . . . .	5c	20c			



Marjoram.





**VINE PEACH.**  
The vine is somewhat similar to the muskmelon vine, and requires the same cultivation. The fruit is of a bright orange-yellow color, somewhat russeted. For sweet pickles, pies or preserving they are superb. Can be used in every way in which you would use a peach, except that they are not usually liked raw. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c.

#### GARDEN LEMON.

Fruit is of the shape shown in our engraving, is somewhat smaller than Vine Peach, has thinner flesh and is decidedly more acid, thus dispensing with the sliced lemons which are so important in putting up the Vine Peach. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c.



#### GROUND CHERRY.

**Improved Yellow.**—They grow well on most any dry soil; are easier raised than the tomato, and are prolific bearers, and oh! such luscious fruit. For sauce they are excellent, and for pies nothing can equal them for taste and flavor. They are delicious as preserves, and when dried in sugar are much better than raisins for cakes and pudding. Pkt., 5c;  $\frac{1}{2}$  oz., 25c; oz., 40c.

#### CHUFAS OR EARTH ALMOND.

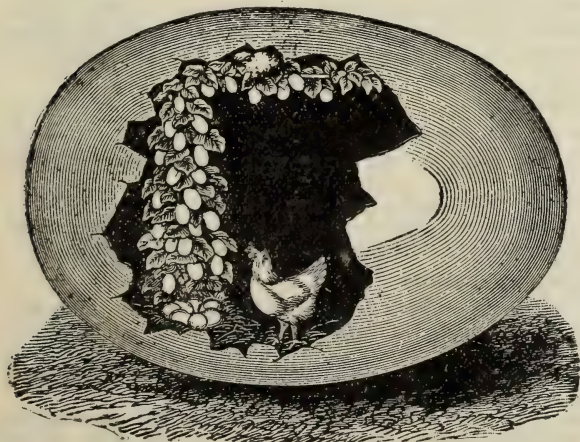
In sweetness and flavor they resemble the cocoanut or almond and are considered very nice put on the table in fruit dish with candies, as an after-dinner relish. Very prolific, a single one yielding from two to four hundred. The nuts grow underground, very near the surface. Plant in April, 10 inches apart, in  $2\frac{1}{2}$  foot rows. Cover them lightly. If seed is very dry,

soak well before planting. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; lb., 50c.

#### RED CROSS PEANUTS.

As early as the earliest, and of the best quality. Boys, here is a chance for you. Think of growing peanuts in your own garden and having plenty of them to eat. Shell the nuts carefully so as not to break the inside skin, and plant as soon as the ground becomes warm, from 2 to 3 feet apart each way, four or five in a hill, covering 2 inches. The soil should be deep and mellow. Large pkt., 10c; lb., 40c, postpaid.

**Popular Fruit Growing** by Samuel B. Green. An authentic book treating on the practical methods of fruit growing, from planting to marketing. It covers the subject of insects and the best methods of destruction, winter protection, grafting, pruning and every other phase of interest to the practical fruit grower, including small fruits. A valuable book for only \$1.00, postpaid.



Japanese Nest Egg Gourds.



Red Cross Peanuts.

#### JAPANESE NEST EGG GOURDS.

Grows almost uniformly to the size, color and shape of a hen's egg. The shells are hard and make the very best nest eggs, as they do not crack. The largest ones, when sawed in two, make excellent pots for starting tomato, strawberry and other plants. Pkt., 5c; oz., 15c.

#### SPECIAL OFFER.

One packet each of Vine Peach, Garden Lemon, Ground Cherry, Chufas, Red Cross Peanuts and Japanese Nest Egg Gourds for only 25c.





Realizing the vast importance of this branch of our business, we devote our careful attention to the growth and selection of the best farm seeds of all sorts.

#### TRUE DWARF ESSEX RAPE.

Dwarf Essex Rape, of the true biennial variety, is now largely grown in this country on account of its rapid growth, being ready to feed in eight to ten weeks from sowing, and producing 25 to 30 tons of green forage to the acre. It grows to a height of 3 feet and covers the surface so densely as to smother out all weeds. It can be sown all through the season, being perfectly hardy, withstands drought, and will produce a crop in any soil by sowing broadcast at the rate of five to ten pounds to the acre. Lb., 15c; 10 lbs., \$1.00; 25 lbs., \$2.00; 100 lbs., \$7.00.

#### RUSSIAN FLAX.

It will pay you to sow nice, pure, high grade flax seed; it is one of the most profitable crops, especially on new land. Peck, 75c; bush., \$2.25.

#### WILD RICE.

The only one of our native plants furnishing food for wild fowl, ducks, geese, etc. Sow in water having a mud bottom. Pkt., 5c; lb., 30c; 5 lbs., \$1.35; 10 lbs., \$2.50.

#### SUGAR CANE.

Wisconsin Early Amber.—The earliest and most popular variety, and makes the finest quality of amber syrup and excellent sugar. Lb., 5c; 10 lbs., 40c; 100 lbs., \$3.50.

#### THOUSAND-HEADED KALE.

The seed can be sown early in April or any time thereafter until midsummer. The plants grow to a height of 3 to 4 feet, and are so covered with small whorls of leaves that the name Thousand-Headed Kale has been given it. Per large pkt., 5c; ¼ lb., 10c; lb., 35c postpaid. By express, 5 lbs., or more, at 25c per lb.

#### FIELD PEAS.

Prices subject to market changes.

Scotch Beauty Peas.—Best blue field peas. Will yield an immense crop of superior quality. Per peck, \$1.00; bu., \$3.75.

White Canada Peas.—More used than any other. Per peck, 75c; bu., \$2.75.

Whip-Poor-Will Cow Peas.—The vines when fed green make the best fodder and are very nourishing. When ripened the ground peas make the best cattle fattener. Peck, \$1.00; bu., \$3.50.

#### BOSTON PEA OR NAVY BEANS.

Plant after the danger of frost is past, in dry, light soil. Best crops are grown in rich soil; but beans do well in ordinary soil. Plant 1½ bushels to the acre in hills, same as corn, or in drills. Hand picked. Quart, 20c; peck, \$1.00; bushel, \$3.75.

Lentils.—A leguminous annual. Succeeds best in dry, sandy soil. Splendid pigeon food and also used extensively for soups. Lb., 25c, postpaid; 100 lbs., \$10.00.

Lupins, Yellow.—Succeeds well in the poorest soil, and is exceedingly valuable for plowing in to improve sandy soils. Sow in the spring when the ground has become warm, at the rate of 90 pounds to the acre. Lb., 10c; 10 lbs., 85c; 100 lbs., \$7.50.





**OATS.**

**Green Mountain Oats.**—An excellent variety coming in about the same time as Swedish Select. The grain is long, white and heavy, and the straw stiff and short, standing up well. Peck 30c; bu., \$1.00; 5 to 10 bus., 95c per bu.

**New Kherson.**—These oats were first introduced here by the University of Nebraska from the province of Kherson in Russia. This variety ripens two or three weeks earlier than other oats. The plant is of vigorous but rather dwarf growth and stiff in straw, hence will withstand strong winds and not lodge. The leaves are broad and the heads large and full, frequently containing more than 100 seeds. Our seed was grown from the original stock. Peck, 35c; bu., \$1.10; 5 to 10 bus., \$1.00; 15 to 50 bus., 90c per bu.

**Regenerated Swedish Select Oats.**—The stock we offer was imported by us direct from the Garton Seed Co., England, who are the originators. By their methods the yield and quality have been greatly improved. The oats this year actually weighs 50 lbs. to the bushel, and the yield was about 25 per cent more than the maximum yield of Swedish Select Oats in this country. Peck, 45c; bu. (32 lbs.) \$1.50; 5 bushels and over, \$1.40 per bushel.

**MINNESOTA NO. 169 SPRING WHEAT.**

The "Grand Prize" Wheat at the World's Fair, St. Louis.

Minnesota No. 169 Wheat was the only wheat awarded a Grand Prize (the highest possible award) at the St. Louis World's Fair in 1904. It was first sent out by the Minnesota Experiment Station in 1902, ten years after being started from a single seed of Blue Stem. It is therefore an Improved Blue Stem or Velvet Chaff. In quality and milling value it takes high rank, being fully equal to the famous Blue Stem. Minnesota farmers are very enthusiastic over it and are growing it largely now all over the state.

For heavy yield, strong, vigorous growth and freedom from smut and rust Minnesota No. 169 now leads all other varieties of spring wheat. We have pure, high grade seed, from a reliable grower. Prices: ½ pk., 30c; pk., 50c; bu. (60 lbs.), \$1.75; 2 to 10 bus. at \$1.65; 10 bus. or over at \$1.60. Special prices for large quantities.

**DURUM WHEAT (Macaroni).**

Kubanka No. 5639.

**The Wheat that Succeeds Where Other Wheats Cannot be Grown.**

It is only about 7 or 8 years since Macaroni Wheat was first introduced in this country, but it is now a leading variety in all the great wheat markets, especially Minneapolis and Duluth. So great is its popularity that it threatens to supersede all other spring wheats. Peck, 50c; bu., \$1.65; 2½ bus., \$4.00.

**SPELTZ OR EMMER WHEAT.**

A most wonderful new grain, somewhat similar to wheat. Will

thrive on most any soil and yields immensely, very often more than barley and oats. It has given good satisfaction to my customers, and every farmer should try it. Peck, 35c; bu., \$1.25.

**BUCKWHEAT.**

**Silver Hull.**—A greatly improved variety. It is in bloom longer, matures its crop sooner, and yields twice as much as any ordinary sort; the grain is rounder, of a beautiful light gray color. The flour is white and more nutritious. Peck, 40c; bu., \$1.50.

**Japanese.**—Ripens a week earlier than Silver Hull, stands up well and makes better flour than any other kind of buckwheat. Peck, 40c; bu., \$1.50.

**SPRING RYE.**

Valuable as a "catch" crop to sow where winter grain has failed. Peck, 45c; bu., \$1.50.

**ODERBRUCKER BARLEY, WIS. NO. 55.**

A new barley introduced by the Wisconsin Agricultural Experiment Station in 1906. The heaviest yielding and plumpest 6-rowed barley ever introduced into the United States. Peck, 40c; bu., \$1.25; 5 bus. or more, \$1.20 per bu.



Swedish Select Oats.





## CHOICE SELECTED NORTHERN-GROWN SEED CORN.

The Seed We Offer is Grown for this Purpose, Carefully Selected.

### SILVER KING CORN—(Wis. No. 7).

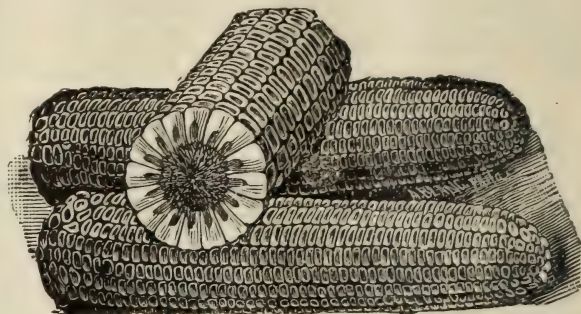
This Corn was originally obtained by the Wisconsin Experiment Station from northern Iowa, and by a careful selection of the best and earliest ears we now have a White Dent Corn with large ears, small cob and deep kernels that is suited to our Wisconsin conditions.

The ears of this Corn average 8 to 9 inches in length and are always filled out to the tips. As a yielder it has no superior. Two years ago 275 members of the Wisconsin Experiment Association reported an average yield for this Corn of 10 bushels per acre more than any other sort. The same year Prof. Moore of the Wisconsin Experiment Station reported a yield of 75 bushels per acre of it. This was a remarkable yield when taking into consideration that the average crop of Corn in Wisconsin was only 33 bushels per acre. Quart, 20c; peck, \$1.00; bu., \$3.50.

### EARLY YELLOW DENT CORN—

(Wis. No. 8).

This Corn was secured by the Wisconsin Experiment Station from Prof. Hays of the Minnesota Experiment Station in 1902, as Minn. No. 13. It is noted for its early maturity, and can be depended on to ripen anywhere in Wisconsin, and is especially adapted for the lake shore counties and northern Wisconsin, where the seasons are too cool and short for Silver King and other large sorts. It makes a fairly large stalk growth, well clothed with leaves. The ears average 7 to 8 inches long. Quart, 20c; peck, \$1.00; bu., \$3.50.



### KOSS' EARLY GOLDEN SURPRISE.

Unapproachable as a yielder, it withstands the harshest weather and when shelled this corn produces a superior quality on account of extreme smallness of cob and depth of grain. The grains are of a rich, golden color, very deep, and profitable on account of small per cent. of waste of cob. The cob is so small that 35 lbs. of ears produced 31½ lbs. of shelled corn. The corn is a vigorous grower, with short, strong stocks and an abundance of green foliage, which makes it an excellent fodder corn. It matures uniformly in 90 days from planting, and all points considered it is the best field corn in cultivation. Golden Surprise is the greatest money earner yet introduced to the American farmer. There can be nothing of greater importance to him than to increase the yield and feeding value of corn. Early Surprise will give that result. Quart, 15c; peck, 75c; bu., \$2.25; 5 bus. or more, \$2.15 per bu.

### IOWA GOLD MINE.

A handsome early corn, ripening a few days after Pride of the North; ears are of good size, very even and uniform in shape, cob small, with very deep grains of a bright golden color, which dry out very quickly as soon as ripe. Ears have been shelled of this variety which produced 64 lbs. of shelled corn and only 6 lbs. of cobs to the bushel. Quart, 15c; peck, 50c; bu., \$1.50; 5 bus. or more, \$1.40 per bu.

### IOWA SILVER MINE.

A very popular White Dent Corn, maturing medium early. The stalks grow seven to eight feet high, in many cases yielding two and three good ears, which are set about four feet from the ground. Quart, 15c; peck, 50c; bu., \$1.50; 5 bus. or more, \$1.40 per bu.

### WHITE CAP YELLOW DENT.

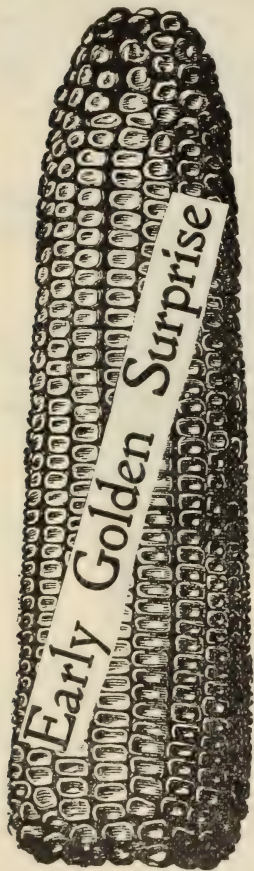
This now famous corn possesses the earliness of Pride of the North, and will produce a greater yield on thin, poor land than any other corn. Grows about 6 to 7 feet in height, with abundant foliage and fine, large ear. The tip ends of the grains are white, the inside yellow, making it of a beautiful color, both when on cob and when shelled. Quart, 15c; peck, 50c; bu., \$1.60; 5 bus. or more, \$1.50 per bu.

### ANGEL OF MIDNIGHT.

An extra early yellow flint, 8-rowed variety. The ear is perfect in shape; length 10 to 13 inches. Rows straight and even, and filled from tip to tip; stalks are of medium size. Quart, 15c; peck, 55c; bu., \$1.50; 5 bu. or more, \$1.40 per bu.

### WISCONSIN WHITE DENT.

The best White Dent for this northern latitude, 16 to 20 rows, small cob, large kernels. Quart, 15c; peck, 50c; bu., \$1.50; 5 bus. or more, \$1.40 per bu.





**KOSS' GOLDEN BEAUTY CORN.**

**Has the Largest Grain and Smallest Cob of Any Corn in Cultivation.**

This famous corn still retains its popularity as an exceedingly early and prolific variety, always maturing in 90 days; often shelling 62 lbs. of grain from 70 lbs. of ears. Kernels closely set, large, of deep orange color; cob very small; stalks about 7 feet in height. This is probably the best Dent Corn for general cultivation in the North, and is now largely used in the South and West, as it matures its crop before the hot winds affect it. We offer pedigree seed grown from the original stock with care. This corn is not fully appreciated until the large yield and small percentage of cob is carefully noted. There is no yellow Dent Corn yet discovered that can take the place of this most valuable variety. It is a safe corn for any section of country, never disappoints the grower by maturing too late, yields more corn acre for acre than any other, and has by far the most satisfactory record of any yellow Dent Corn ever introduced. Quart, 15c; peck, 75c; bu., \$2.25; 5 bus. or more, \$2.15 per bu.

**REID'S YELLOW DENT.**

This is now the standard variety in many of the corn-growing sections of the middle west. Ears average 9 to 10 inches, tapering slightly toward tip, are about 6 inches in circumference, contain 16 to 20 rows and are remarkably uniform. Kernels light yellow, deeply dented and well placed on a cob of medium size. Usually matures in 100 days. We have been very well pleased with our crops of this variety, having found it sure to mature when planted early and a very heavy yielder. Peck, 50c; bu., \$1.60; 5 bus. or more, \$1.50 per bu.

**PRIDE OF THE NORTH.**

No variety of corn has been more extremely grown in the northwestern states than this. It is early, with a fairly large ear and small cob closely set with deep kernels; color bright yellow. It will shell 60 to 64 lbs. per bushel of 70 lbs. of ears; 14 to 16 rows often placed irregularly on the small red cob. Quart, 15c; peck, 50c; bu., \$1.50; 5 bus. or more, \$1.40 per bu.

**BRAZILIAN FLOUR CORN.**

A grand stooing sort; each kernel produces several stalks, each stalk bears two or three beautiful white ears which make a flour equal to wheat. It produces an immense amount of fodder for feeding stock. Qt., 20c; peck, \$1.00; bu., \$3.50; 5 bu. or more, \$3.25 per bu.

**SWEET FODDER CORN.**

This is made up of any unselected stock we may have of Sweet Corn and is valuable for feeding, the stalks and stems being so sweet and juicy that cattle eat it up greedily, leaving no waste of stalks, which is common with other fodder corns. Quart, 15c (by mail 25c per quart); peck, 75c; bu. (measured), \$2.75.

**PEDIGREE RED COB ENSILAGE CORN.**

This variety is now grown in the large dairy regions of Wisconsin so extensively as almost to exclude all of the other so-called Fodder Corns, and the verdict is that it is the best. It is sweet, tender and juicy, has short joints, abundance of leaves, and grows to a great height, furnishing more than double the bulk and much more nourishment than ordinary field corn. Every lot is tested and re-cleaned, hence you buy no cobs or dirt. Peck, 40c; bu., \$1.35.

**KAFFIR CORN.**

Stocky and perfectly erect, foliage broad. The seed heads grow from 10 to 12 inches in length and the product of grain will average 60 bushels to the acre. Lb., 5c; 10 lbs., 35c; 100 lbs., \$3.00.

**JERUSALEM CORN.**

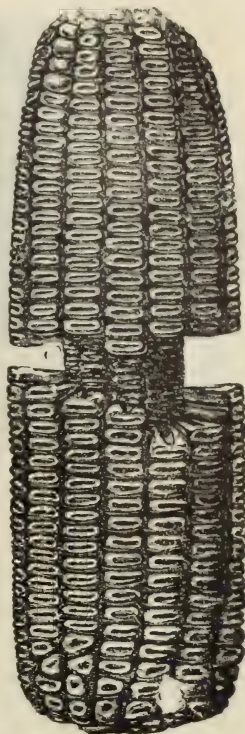
Claimed by many to be an improvement on Kaffir Corn, as it is a surer crop in unfavorable seasons. Produces a large crop of foliage which is of very good quality. Seed white and nearly flat. Yields a good grain crop also. Three to four pounds will plant an acre in drills, 40 to 50 lbs. broadcast. Pound, 8c; peck, 85c; bu. (50 lbs.), \$3.00.

**TEOSINTE.**

Somewhat resembles corn in appearance, but the leaves are much longer and broader, and the stalks contain sweeter sap. Horses and cattle eat it as freely as young sugar corn. Large pkt., 10c; oz., 20c; ¼ lb., 40c; lb., \$1.35; 2 lbs. (sufficient for 1 acre), \$2.50.

**AUSTRALIAN SALT BUSH.**

This forage plant from Australia is a wonder for the alkali plains of the West. Yields 20 tons of green fodder per acre. Plant is perennial. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25.



Koss' Golden Beauty Corn.



Kaffir Corn.



JERUSALEM CORN.



## SEED POTATOES.



Prosperity.

With no other seed is the importance of change more essential than with potatoes, and by using our northern grown seed you are assured of **early maturity, increased yield and vigorous growth.** The following varieties are, we think, the best and most satisfactory sorts for growing in Wisconsin and other states of the same latitude. Most of our seed potatoes are grown in Minnesota and the Dakotas and are of superior quality. Order as early as possible and we will ship as soon as weather permits. Prices are subject to important market changes. Ask for quotations on large lots.

Our prices are extremely low for this stock, which is undoubtedly superior to sand land potatoes or home grown stock. You stand in your own light if you

plant home grown potatoes such as many dealers offer you. We do not sell common potatoes for seed, but have our seed grown for us in the north from pure bred seed of the very best quality that we know will give best results. Our seed potato business is increasing by leaps and bounds; because our customers know they can depend on our stock and do not hesitate to order from us. Every trial order means a satisfied customer.

**Early Prosperity.**—An extra early sort that is of such superior merit that it is sure to at once take a front place with market gardeners as well as with everyone who wants a potato of first-class quality which will mature very early. It is a seedling which was offered last year for the first time and in it we have by far the earliest white potato that we have ever seen. While it is not so much earlier than our Triumph, still it is much larger, of better quality and does well on soils which do not seem favorable to the Triumph. It is of very strong, vigorous, healthy growth, appearing to be entirely blight proof. The tubers are of oval shape, slightly flattened, smooth, and few eyes. They cook well, even when small, and are white, floury and of excellent flavor. Summing it all up it is as early as any potato on our list, of handsome shape and color and unsurpassed for table use. Per peck, 65c; bu., \$2.00; 5 bus. or more, \$1.90 per bu.

**Extra Early Ohio.**—Early Ohio is the most popular early potato in this country. We have more calls for it than for any other variety. Every potato grower knows what it is, and knows just about what it will do in his locality. It is the standard extra early the country over, and other varieties are measured by it. We have an extra choice strain of Early Ohio. We will venture to say that not one farmer in ten, the country over, who thinks he has Early Ohio has pure stock. Most of them do not know that they are mixed. But Early Ohio is an old variety and has become frightfully mixed throughout the United States. Farmers and market gardeners, better sell off your own Ohios and get some of our pure improved, grown from Red River Valley seed. Peck, 50c; bu., \$1.50; 5 bus. or more \$1.40 per bu.

**Bliss Triumph. — The Earliest Potato in Existence.** A handsome round variety which is by far the earliest variety in the world, maturing a week before the Extra Early Ohio, and is wonderfully productive. The tubers are not large, but are of medium size for early use, and a beautiful red color. For several years past it has been the most popular variety in the southern states and in the Bermudas, and hundreds of carloads are shipped to the northern market and bring fancy prices. It is a vigorous grower and we recommend it for the first early market or family use. Peck, 50c; bu., \$1.50; 5 bus. or more, \$1.40 per bu.



**The Freeman Potato** has fully realized the glowing predictions which I made for it at the time of its introduction. It proved to be a rival of the famous Early Rose, and my customers have made money out of it. The Freeman is a strong grower, containing fresh, vigorous blood. It is early in reaching maturity and enormously productive, and is universally admitted to be the finest flavored potato on the market. People say that when once used on the table it is sure to remain there, on account of its superlative excellence. Peck, 55c; bu., \$1.65; 5 bus. or more, \$1.55 per bu.

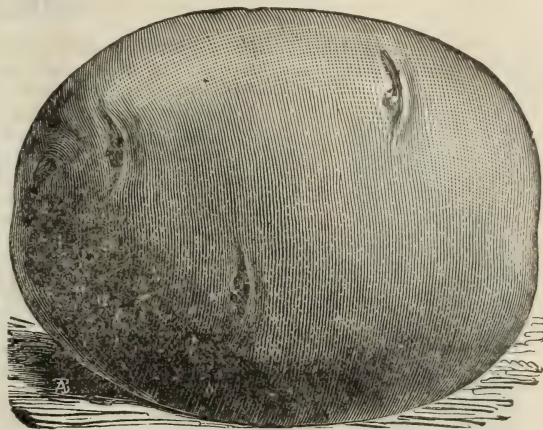
This is the year above all years that you should change your Seed Potatoes.



**POTATOES—Continued.**

**Sir Walter Raleigh.**—The two greatest money makers of recent years have been Rural New Yorker No. 2 and Carman No. 3. Both originated with the late E. S. Carman of the Rural New Yorker. Since then Sir Walter Raleigh has been brought forward as "Mr. Carman's Best." The introducers say: In most respects it closely resembles Rural New Yorker No. 2, but is more uniform and yields practically no small tubers, every one being remarkable. It is unquestionably the best of its type. Farmers who plant this variety are practically certain of getting big returns on their investment, as it invariably yields big crops and the potatoes will always sell. Peck, 55c; bushel, \$1.65; 5 bus. or more, \$1.55 per bu.

"The proof of the potato is in the eating." Send in your order for any of these varieties. You will be more than satisfied.



Sir Walter Raleigh.

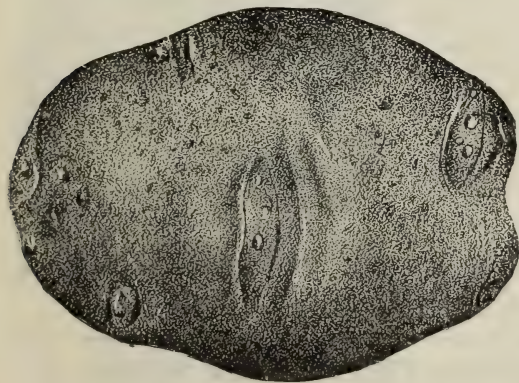
**CARMAN NO. 3.**

All the Carman Seedling (originated by Elbert S. Carman, late editor Rural New Yorker) have proven popular, but Carman No. 3 is undoubtedly the best of all.

Without an exception it is the greatest yielding potato ever introduced, and may be fairly claimed that it does not yield any small tubers. Practically every potato is of marketable size. Both skin and flesh are white. The eyes are few and shallow. Its table qualities are up to the standard. It has no hollow hearts and no dark or hard spots. We are confident it will please you for field culture, on account of its productiveness and fine appearance. It can be relied upon to bring in money. Peck, 50c; bushel, \$1.50; 5 bus. or more, \$1.40 per bu.

**RURAL NEW YORKER NO. 2.**

It is a dandy and we have had good returns from it, with but few unmarketable potatoes among them. They have a great record as a drought resister and most years they beat them all. A fine keeper, and from January until new potatoes come, it is of an excellent quality. It is one of the smoothest, shallow eyed and pretty shaped potatoes grown. They are great yielders and the main crop of the late varieties. Peck, 45c; bushel, \$1.50; 5 bus. or more, \$1.40 per bu.



Hottentot Potato.

**HOTTENTOT.**—The potato of quality. This variety is very popular with the farmers, by reason of its great yielding qualities and the heavy, solid tubers of good shape and large size, which make it a favorite variety in the market. We list it here in deference to the local sentiment, as we are sure that any variety that will stand the test of public demand and at the same time give full satisfaction to the grower is worthy of wide dissemination. The tubers are exceedingly heavy for size, indicating close grain—the real basis of table quality. Color is white, slightly russeted, and the plant is very vigorous and prolific. For main crop will produce enormous yields and will keep longer than ordinary varieties. Peck, 55c; bushel, \$1.65; 5 bus. or more, \$1.50 per bu.

**MORE VARIETIES.**

There are some seedsmen who list a larger variety of potatoes than we have, and more kinds, but there are none who have better. We only list the cream of the choice varieties and discarded all that did not come up to our high standard of perfection.

I believe it is useless to list a lot of varieties that are adapted to only a limited amount of territory. The varieties we list are leaders everywhere. They will do well from Florida to Canada, and from Maine to California. So, I say, don't experiment. We have the best and leading varieties for all conditions of soils.

Prices on potatoes frequently change as the market advances or declines. If you want a quantity write us for special quotations.



## MILLETS.

Makes a large yielding and most nutritious hay crop, quick growing and easily cured. It should be seeded thickly, one bushel per acre, and should be harvested while in bloom. If the seeds are allowed to form, the stalks get hard and it does not make near so good a hay.

There is nothing like millet to cover up shortage in your hay crops. It can be sown up to the middle or end of July and makes a valuable catch crop. Grain bags, 20c each extra. Prices subject to market changes.

**Common Millet.**—Very early, grows 2 to 3 feet high, foliage broad. Lb., 5c; 5 lbs., 20c; 10 lbs., 35c; bu., \$1.50.

**Hungarian (Grass) Millet.**—A valuable forage plant, similar to common millet. Lb., 5c; 5 lbs., 20c; 10 lbs., 35c; bu., \$1.50.

**Hog Millet.**—A valuable variety, maturing at the same time as Hungarian Grass; very productive. Lb., 5c; 5 lbs., 20c; 10 lbs., 35c; bu., \$1.50.

**German Millet.**—Much better than Common Millet, as it will produce double the crop. It grows 4 to 5 feet high, very leafy, seeds round, golden yellow. About two weeks later than Common Millet. Our seed is southern grown and is much superior to northern grown seed, as it yields more. Sow  $\frac{1}{2}$  bushel per acre. Price, best grade, lb., 5c; 5 lbs., 20c; 10 lbs., 35c; bu., \$1.50.

**Japanese Millet (Crus Galli).**—Perhaps the most valuable introduction of recent years in the line of forage plants. Adapted to all sections and a great success wherever tried. It is very highly recommended by the U. S. Agricultural Department and by the Experiment Stations. It grows 6 to 8 feet high and produces immense crops of splendid feed, especially on moist soils. As high as 16  $\frac{1}{2}$  tons have been reported from 1 acre, and it makes excellent hay, superior to corn fodder. Sow broadcast, 12 to 15 lbs. per acre. 1 lb., 5c; peck, 45c; bu., \$1.75.

## SUNFLOWER.

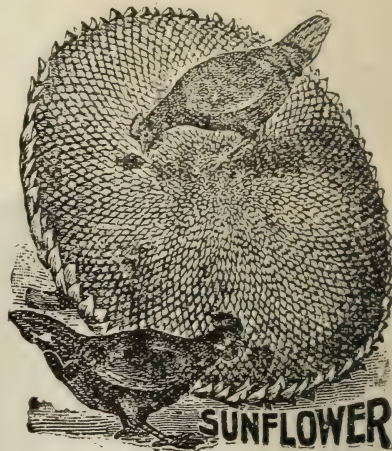
**Mammoth Russian.**—The largest of all sunflowers. This is without doubt one of the best paying crops that can be raised. Seeds are the best of food for poultry and is much cheaper to raise than corn. Stalks, which grow very large, make excellent firewood. It is also said to afford protection against malaria. Lb., 10c; 3 lbs., 25c; 10 lbs., 65c; 100 lbs., \$5.75.

## ARTICHOKE—IMPROVED WHITE FRENCH.

Produce 1,500 Bushels Per Acre. Easily Grown. Great Disease Preventer. The Hogs Do the Harvesting.

German Millet.

Their wonderful productiveness and the ease with which they can be produced is always a surprise to those who cultivate them the first time. Forty head of hogs and pigs may be kept without other food on an acre of Artichokes from the time frost is out of the ground until they grow again, and from October first until the ground freezes solid. Hogs taken from Artichokes to Blue Grass and Clover will not root up the sod, as they are free from intestinal worms, constipation, indigestion and fever, caused by feeding corn in winter. They can be planted either in fall or spring, for while in the ground freezing and thawing does not hurt them. Cut to one eye like potatoes, and plant in rows 3  $\frac{1}{2}$  feet apart and 18 inches in the row. When dug in the fall and stored they should be mixed with one part of soil to ten parts of Artichokes, to prevent shrinking. Per peck, 75c; bu., \$2.50; 3 bu. lots, sufficient for one acre, \$7.00. By express or freight only.

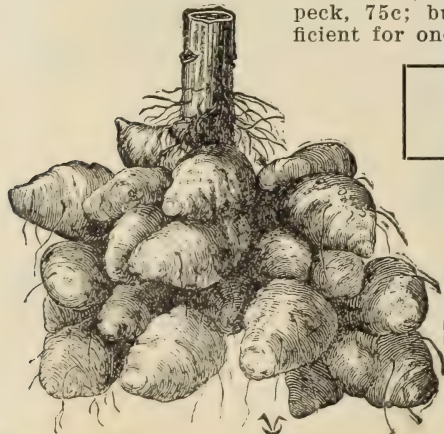


**KOSS' SEEDS ARE HONEST SEEDS  
AT HONEST PRICES.**

## SAND VETCH,

Or Winter Vetch.

A comparatively new forage plant which has proved of high value, and is highly recommended by the U. S. Dept. of Agriculture. Succeeds and produces good crops on poor, sandy soil, but is more vigorous on good land and grows 4 to 5 ft. high. Perfectly hardy throughout the United States; is green all winter. Exceedingly nutritious, more so than clover, eaten with a relish, may be fed to all stock. Earliest for cutting and a full crop may be taken off before planting spring crops. Sow  $\frac{1}{2}$  bu. per acre in spring or fall. Per lb., 15c; 10 lbs., \$1.40; 25 lbs., \$3.25; 100 lbs., \$12.00.



White French Artichoke.



## GRASS AND CLOVER SEEDS.

Prices Subject to Market Fluctuations.



Meadow Fescue.

**Meadow Fescue, or English Blue Grass.**—Succeeds well in almost all soils, from high, dry land to moist, standing the dry summer heat excellently. It is valuable as pasture grass, being one of the earliest in the spring and the latest in the fall. It is hardy, never grows in tufts, and being tender and succulent, makes excellent hay. It is a perennial, 2 to 3 feet high, flowering in June and July. Lb., 15c; 10 lbs., \$1.25; 100 lbs., \$10.50.

**Orchard Grass.**—One of the most valuable of all pasture grasses, coming earlier in spring and remaining later in autumn than any other. It grows about 2½ feet high, producing an immense quality of leaves. It grows in tufts, and is therefore not adapted for growing alone, but should be grown with Red Clover, Tall Meadow Oat Grass, or Rye Grass. Lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00.

**Tall Meadow Oat Grass.**—For either hay or permanent pasture. Does well on any soil, but of special value on clay land. Grows tall, and therefore desirable for meadow. Does not winter kill. Seldom sown alone, but should be included in all mixtures. Lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00.

**Red Top.**—Sown largely in marshy land and sloughs in the West. In the East it is one of their principal sorts, but is not so highly valued here. It makes a fine, close turf of fair quality when not allowed to go to seed. Solid or fancy clean seed. Lb., 15c; 10 lbs., \$1.35; 100 lbs., \$12.00.

**Perennial Rye Grass (or English Rye Grass).**—A nutritious permanent grass for meadows and pastures, or for mixing with other grasses for lawns. Does well on sloping banks, as its roots are fibrous and mat-like. Does well on almost any land, but prefers rich or moist soil, such as will produce a good corn crop. Sow 20 lbs. per acre. Lb., 15c; 10 lbs., \$1.25; 100 lbs., \$9.00.

**Italian Rye Grass.**—An annual variety of above, which can be depended upon to give a large crop for the first year. Valuable for sowing with crimson clover as a catch crop on red clover fields where clover has winter killed. Lb., 15c; 10 lbs., \$1.25; 100 lbs., \$9.00.

**Crested Dogtail.**—For permanent pastures, especially on high land and hard, dry soils and hills; very hardy, little affected by extreme drought or cold. Per lb., 30c; 10 lbs., \$2.75; 100 lbs., \$24.00.

**Sheep's Fescue.**—Is suited to light, sandy soil, and dry uplands or hillsides. It is deep rooted and not affected by extreme drought. Sheep are especially fond of it. Sow 14 lbs. per acre. Lb., 25c; 10 lbs., \$2.00; 100 lbs., \$18.00.

**Wood Meadow Grass.**—Invaluable for wooded pastures or shaded ground, and should be in all mixtures for permanent pastures, especially in shady places. Sow 20 lbs. per acre. Per lb., 40c; 10 lbs., \$3.50; 100 lbs., \$30.00.

**Meadow Foxtail.**—Closely resembles Timothy, but flowers much earlier, and thrives in all soils, excepting dry sand or gravel. It succeeds best in strong, moist, rich soils. It is highly relished by

all kinds of stock, endures close cropping, and forms a luxuriant aftermath. Many farmers confound this with our wild Foxtail or Squirrel Grass, which is a great mistake, as this is really a valuable variety. (10 lbs. per bushel.) Per lb., 35c; bu., \$2.75; 100 lbs., \$25.00.

**Kentucky Blue Grass.**—It is productive and unusually early in the spring, furnishing delicious foods for all kinds of stock. It is not easily affected by drought or frost, is suited to a great variety of soils. Unexcelled for lawns. Our seed is all new crop and the best grade. "Fancy Cleaned." Lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00.

**Bromus Inermis.**—This useful grass, also called Hungarian or Smooth Brome Grass, grows to a height of 3 or even 5 feet. It is a native of Hungary. It has done well in America, especially on dry, arid soils, in which situations its drought-resisting qualities are seen to advantage. It is claimed for it that it will succeed in a wider range of temperature than any other grass, and that it will produce satisfactory crops on land too poor to support timothy and the other agricultural grasses. Weight of seed, 14 lbs. to the bu. Sow 20 to 25 lbs. per acre. Lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00.

**Timothy.**—Wisconsin grown, thoroughly re-cleaned seed. Subject to market changes (45 lbs. per bushel). Per lb., 10c; bu., \$3.00; 100 lbs., \$6.50.



Italian Rye Grass.



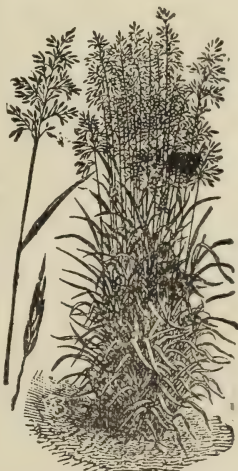
Orchard Grass.



Perennial Rye Grass



Tall Meadow Oat Grass.



Bromus Inermis.



## CLOVER SEED.

Prices subject to market changes.

No other plant is of such importance to agriculture as clover, and this not only on account of its great value for pasture and for hay, but by far its greatest value comes in as a soil reclaimer, as it restores fertility to the land that has been exhausted by continuous cropping. Clover is the foundation to all successful farming and is unquestionably the most useful plant that can be grown on the farm.



Crimson Clover.

**Medium Red Clover.**—This is the most important of all clovers and the standard everywhere for hay and pasture. It is known as Common Red or June Clover in many sections. Our Wisconsin grown clover seed has become widely known for its purity, strong vitality, hardiness, vigorous and healthy growth and stooing qualities, so that now we receive many orders from the most distant parts of the United States. Well posted farmers are beginning to appreciate the difference between it and ordinary stock. Per lb., 25c; peck, \$3.50; bu., \$13.50; 100 lbs., \$22.00.

**Mammoth Red Clover.**—Also called Sapling or Pea Vine Clover. This greatly resembles the Medium Red, but is of much taller and more vigorous growth. Nothing equals it for hog pasture, as it will produce an enormous yield and is of the highest feeding quality. It gives quick results, making an unequaled crop, and is usually considered a permanent pasture grass. If your soil is poor and needs enriching there is no fertilizer as cheap and good as sowing Mammoth Clover and plowing the crop under. Per lb., 25c; peck, \$3.50; bu., \$13.50; 100 lbs., \$22.00.

**White Clover.**—It is the most hardy of any variety of clover, and as it is of a creeping habit it is desirable for sowing on terraces or sloping grounds. Price for our choicest quality, per lb., 50c; 5 lbs., \$2.40; 10 lbs., \$4.50.

**Seradella.**—For very dry soils. Lb., 15c; 10 lbs., \$1.00; 100 lbs., \$8.00

**Crimson Clover (also called Giant Incarnate).**—This is an annual variety in common use in the East and South for feeding green. The yield in fodder is immense, and after cutting it at once commences to grow again and continues until severe cold, freezing weather. It grows about 1 foot

high, roots nearly black, leaves long, blossoms long, pointed and of a very deep red or carmine color. Lb., 15c; peck, \$2.00; bu., \$7.50; 100 lbs., \$12.00.

**Bokhara Sweet or Bee Clover (Melilotus Alba).**—This Clover is especially adapted for bee pastures, and whoever keeps bees should not fail to put in at least half an acre to an acre, for it is greatly relished by them, and the honey is as nice and clear as crystal. It grows on poor and sandy soil and also on land that is as solid as a rock; its strong roots will penetrate any kind of soil. The value of the Bokhara Clover as a fertilizer was not known at all, until recently, several experiment stations published articles on it. Price: Lb., 25c; peck, \$3.60; bu. (60 lbs.), \$14.00.

**Sand Luzerne.**—For light, sandy soil. Lb. 35c; peck, \$4.25; bu., \$16.50.

**Alsike or Swedish Clover.**—This clover comes from the little province of Alaska in Sweden. It is a great favorite with bee raisers, and its flower has a sweet and agreeable odor. Lb., 30c; peck, \$3.75; bu., \$14.50.

**Sainfoin Clover (also called Espercette Clover).**—An excellent but comparatively little known variety of special value, for growing on light, dry, sandy or limestone soils. Lb., 15c; 10 lbs., \$1.35; 100 lbs., \$12.50.

**Alfalfa, or Luzerne Clover.**—Under proper management it will yield 10 to 12 tons to the acre. All classes of stock are exceedingly fond of it. The roots are so long and grow so deep, frost cannot heave or throw them out in winter. One sowing will stand for 20 years, and instead of impoverishing the soil, enriches it. Grows on the thinnest sandy soil and thrives in greatest drought. Sow broadcast about 25 lbs. to the acre. Comes up very spindling and slowly, and it is necessary to mow the weeds to give it light, but when once established the weeds will be smothered. Lb., 25c; peck, \$3.25; bu., \$12.00; 100 lbs., \$20.00.

**Turkestan Alfalfa.**—This has recently been introduced into cultivation by our Agricultural Department. It was found growing on the high table lands of Asia, and is especially adapted to the sudden changes of temperature that prevail there—intense heat at midday and very often frost at night, even in midsummer. It resembles the ordinary Alfalfa, described on this page, excepting that the leaves are shorter and are sparsely clothed with short hairs. Its cultivation has been quite successful in the arid regions of the West, and under conditions where Alfalfa or Luzerne fails the Turkestan Alfalfa will prove to be of the greatest value. Lb., 25c; peck, \$3.25; bu., \$12.00; 100 lbs., \$20.00.



Alfalfa.



## SPECIAL GRASS AND CLOVER MIXTURE.



### PERMANENT MEADOW MIXTURES.

Will make the best quality hay, as the mixture contains such grasses as produce a heavy growth and mature together. Sow from 15 to 20 lbs. per acre, or for a top seeding about half the amount.

**No. 1. For Medium Soils.**—Contains Meadow Fescue, Perennial Rye Grass, Italian Rye, Orchard Grass, Tall Meadow Oat, Timothy, Red Clover, Alsike, Sweet Vernal, etc.

**No. 2. For High, Dry Land, Light or Gravelly Soils.**—Contains Sheep's Fescue, Alfalfa, Hard Fescue, Perennial Rye Grass, Meadow Fescue, Timothy, Kentucky Blue Grass, Sweet Vernal, etc.

**No. 3. For High, Dry Land, Heavy or Clay Soils.**—Contains much the same as above, with the addition of Orchard Grass, Crested Dogtail and Bromus.

**No. 4. For Moist and Rich Soil, or Land Subject to Overflow.**—Contains Water Meadow Grass, Meadow Foxtail, Perennial Rye Grass, Meadow Fescue, Red Top, Meadow Soft Grass, Alsike, Clover, etc.

**No. 5. For Top Seeding Swamps, Marshes, Etc.**—(Sow 10 lbs. per acre.) Contains much the same as above, in different proportions.

**Prices:** Any of the above Permanent Meadow Mixtures, per lb., 20c; 10 lbs., \$1.80; 20 lbs., \$3.50; 50 lbs., \$8.50; 100 lbs., \$15.00.

### PERMANENT PASTURE MIXTURES.

Selected with a view of having a succession of grasses coming on constantly from earliest spring through the dry summer weather, and through the fall. It is permanent and keeps improving year after year. Sow from 15 to 20 lbs. per acre, or for top seeding, half the amount.

**No. 6. For Medium Soils.**—Contains Kentucky Blue Grass, Meadow Fescue, Perennial Rye Grass, Orchard Grass, Tall Meadow Oat Grass, Hard Fescue, Alsike Clover, White Clover, Timothy, Red Clover, etc.

**No. 7. For High, Dry, Gravelly Soils.**—Contains Sheep's Fescue, Hard Fescue, Creeping Bent, Bromus Inermis, Crested Dogtail, Meadow Fescue, Timothy, Kentucky Blue Grass, White Clover, etc.

**No. 8. For High, Dry, Heavy or Clay Soils.**—Contains much the same as above, mixed in different proportions, with the addition of Alfalfa and Orchard Grass.

**No. 9. For Moist and Very Rich Soils.**—Contains Perennial Rye Grass, Water Meadow Grass, Water Fescue, Meadow Foxtail, Orchard Grass, Meadow Soft Grass, Tall Meadow Oat Grass, Alsike, etc.

**No. 10. For Orchards, Wood Pastures and Shady Places.**—Contains Wood Meadow Grass, Orchard Grass, Kentucky Blue Grass, English Blue Grass, Meadow Foxtail, Sweet Vernal, Red Clover, Alsike, etc.

**Prices:** Any of the above Permanent Pasture Mixtures, per lb., 20c; 10 lbs., \$1.80; 20 lbs., \$3.50; 50 lbs., \$8.50; 100 lbs., \$15.00.

### SHEEP PASTURE MIXTURE.

Everyone who keeps sheep should sow this mixture. It will grow well on high, dry, poor soil, and also on good ground; is drought resisting and endures close cropping. Contains Sheep's Fescue, Hard Fescue, Red Fescue, Creeping Bent, Crested Dogtail, Bromus Inermis, Meadow Fescue, White Clover, etc. Sow 25 lbs. per acre. Prices: Per lb., 22c; 10 lbs., \$2.00; 25 lbs., \$4.50; 100 lbs., \$17.

### QUICK RESULT PASTURE.

Not permanent, but when sown early will give a full crop of hay and good pasture until late in the fall. Desirable for both cattle and hogs. Contains Italian Rye Grass, English Rye Grass, Meadow Fescue, Timothy, Crimson Clover, Mammoth Red Clover, Tall Meadow Oat Grass, etc. Sow 15 lbs. per acre. Price per lb., 20c; 10 lbs., \$1.65; 25 lbs., \$3.75; 100 lbs., \$14.00.

### PERMANENT HOG PASTURE.

Ready to use the first year and many years thereafter. Will fatten the hogs quickly and keep them in good health. Much superior to a corn diet for them and helps keep hog cholera and similar diseases away. Contains Perennial Rye Grass, Orchard Grass, Italian Rye Grass, Clover, Timothy, Red Top, etc. On any ordinary soil sow 15 lbs. per acre. Price per lb., 20c; 10 lbs., \$1.65; 25 lbs., \$3.75; 100 lbs., \$14.00.



## KOSS' LAWN GRASS SEED

"Thank God for grass! No other glory vies  
With the refreshing glory of the grass;  
Not e'en the blue of the o'erbending skies,  
Nor fading splendor when the daylight dies,  
Can this sweet smile of living green sur-  
pass."

A nice, velvety lawn adds more to the beauty of a place than any other adornment, and even the humblest home may be made attractive with such surroundings, while without a good lawn even the finest flowering plants and elegantly arranged beds seem insignificant. How important it is then to plan for the best lawn obtainable. Do not spend money in sodding a lawn, for it is expensive and seldom satisfactory. When sod is cut from the roadside or some out of the way pasture, it is poor in quality and full of weeds, and when unevenly laid produces a rough surface which disfigures the lawn. It costs much less to sow the seed and the lawn is far better. Ask for circular, "How to Make a Lawn."

Three to four bushels of Lawn Grass Seed should be sown per acre, or one quart for every 300 square feet. It is necessary to sow the grass seed very thick so as to obtain a close stand, which will prevent the weeds from coming up. A great many lawns have to be sown over again when not enough seed has been used. After sowing the seed it should be harrowed or raked in lightly, which should be followed by a roller so as to bring the seed in direct contact with the soil and insure an immediate sprouting. If a roller is not at hand, firm the ground down by means of a wide board or plank.

**Evergreen Lawn Grass Seed.**—This is a mixture of the best varieties of grass seeds suited for growing together in the central and northern states and will make a beautiful, soft velvety lawn, as handsome green as an emerald, and is formed of grasses which keep green from early spring all through the hot dry summer weather, until late in the fall. It comes up quickly (in about two weeks after seed is sown) and after once up it soon spreads to cover the ground and is ready for the lawn mower in six or eight weeks. It is permanent, maintaining its beauty for a life-time, although it is a good plan to give any lawn a topseeding once every two or three years. This mixture is made by ourselves from new crop, re-cleaned pure seeds of the best varieties, well suited for even and permanent growth, as good as money can buy. It cannot be excelled for producing a rich velvety lawn of beautiful dark green color. Pint 10c; quart 20c; lb. 25c; 5 lbs. \$1.15; 20 lbs. (1 bushel) \$4.25.

**Terrace Lawn Mixture.**—It is sometimes difficult to get a good sod on sloping ground, terraces, side hills or embankments. This is a mixture of such grasses as have strong spreading roots, making a close turf, which heavy rains cannot wash out easily. On new lawns sow some oats also to prevent washing until grass gets started. Per pint 15c; quart 25c; lb. 35c; 5 lbs. \$1.50; 20 lbs. \$5.75.

**Central Park Lawn Grass.**—A very fine mixture for lawns, but is of special value for parks and around country homes where it is not convenient to mow the lawn frequently. It contains some fragrant grasses which give out a delightful odor both when growing or when cut. It is the grass for country homes, parks and large estates and for this purpose sow about 50 lbs. per acre. Per quart 15c; lb. 20c; 5 lbs. 90c; 20 lbs. \$3.25.

### FERTILIZE YOUR LAWN.

**Use Bone Meal.**—For top dressing of lawns, pastures and meadows; also for use in the vineyard and about fruit trees and bushes. It carries ammonia and phosphoric acid, but not potash, and may be applied at any time of the year. It keeps on feeding the soil for fully 10 months and its effect is plainly apparent upon grass land for years. One of the safest and most economical manures. Use 400 to 600 lbs. per acre. 25 lbs., 75c; 100 lbs., \$2.50; 500 lbs., \$11.25.

**Shady Place Lawn Mixture.**—This mixture is a combination of fine dwarf growing, evergreen varieties of grass, which grow naturally in the woods or in shaded spots. They are mixed in proper proportions to make a fine lawn under the shade trees. Sow seed thickly, 1 quart to 150 square feet. Pt., 15c; qt., 25c; peck, \$1.50; bu. (20 lbs.), \$5.75.

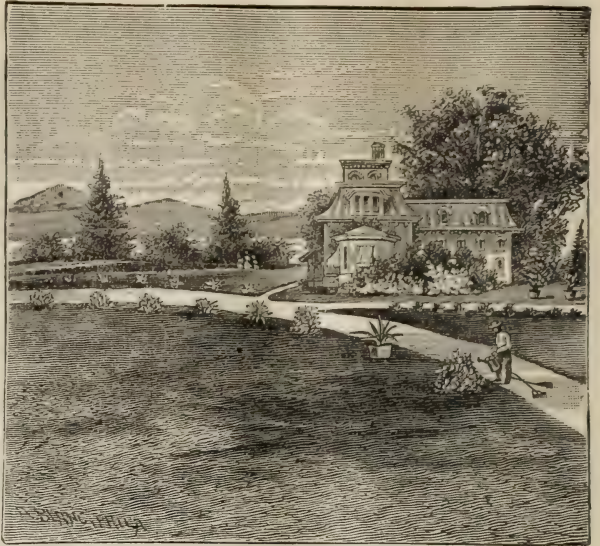
**Golf Links Mixture.**—This is a mixture of various sorts of fine grasses which, when liberally sown, will produce a fine green sward during the growing season. They grow vigorously when cut closely, form a fine mass of interlacing roots, and also differ in their seasons of maturity, so that a succession of fresh growths is secured from earliest spring to latest fall. This mixture includes Sweet Vernal Grass, which gives the perfume of "New Mown Hay." Pint, 15c; qt., 25c; peck, \$1.50; bu. (20 lbs.), \$5.75.

**Putting Green Mixture.**—A mixture of extra fine grasses, that will make a close, firm, green and lasting turf; improves the more it is trampled. Pint, 15c; qt., 25c; peck, \$1.50; bu. (20 lbs.), \$5.75.

**Make Your Place  
LOOK LIKE HOME  
This Year by Fixing  
up a Good Lawn.**

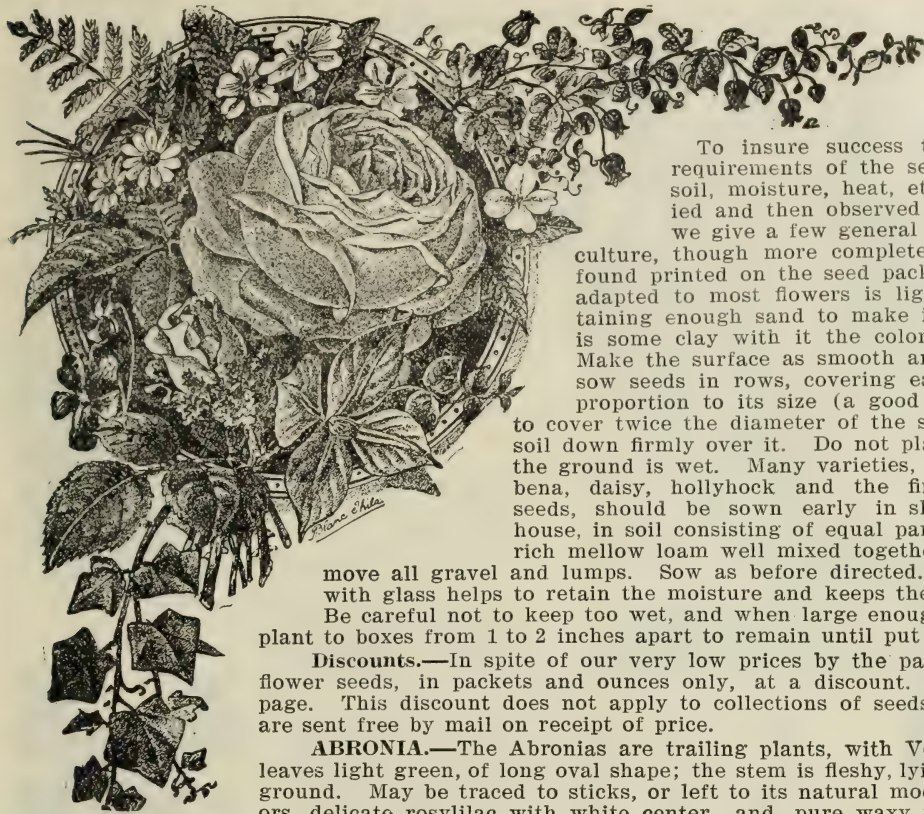
**Kentucky Blue Grass.**—Many of our customers prefer a clear blue grass lawn to the mixtures. Our stock of this is the best grade of fancy cleaned new crop, tested seed. Lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00.

**White Clover.**—The well-known common white clover is very hardy and dwarf growth makes it desirable for lawn mixtures. Its close, dense turf and creeping habit make it desirable for terraces and sloping grounds. Seed is very small and it requires but little in mixtures. Lb., 50c; 5 lbs., \$2.40; 10 lbs., \$4.50.





## Koss' Select List of Flower Seeds



To insure success the conditions and requirements of the several species as to soil, moisture, heat, etc., should be studied and then observed in culture. Below we give a few general directions for their culture, though more complete directions will be found printed on the seed packets. The soil best adapted to most flowers is light, rich loam, containing enough sand to make it porous. If there is some clay with it the colors will be brighter. Make the surface as smooth and fine as possible; sow seeds in rows, covering each sort of seed in proportion to its size (a good general rule being

to cover twice the diameter of the seed) and press the soil down firmly over it. Do not plant any seeds when the ground is wet. Many varieties, such as pansy, verbenas, daisy, hollyhock and the fine greenhouseplant seeds, should be sown early in shallow boxes in the house, in soil consisting of equal parts of fine sand and rich mellow loam well mixed together and sifted to re-

move all gravel and lumps. Sow as before directed. Covering the box with glass helps to retain the moisture and keeps the temperature even. Be careful not to keep too wet, and when large enough to handle, transplant to boxes from 1 to 2 inches apart to remain until put in permanent beds.

**Discounts.**—In spite of our very low prices by the packet, we still offer flower seeds, in packets and ounces only, at a discount. See second cover page. This discount does not apply to collections of seeds. All flower seeds are sent free by mail on receipt of price.

**ABRONIA.**—The Abronias are trailing plants, with Verbena-like flowers; leaves light green, of long oval shape; the stem is fleshy, lying prostrate on the ground. May be traced to sticks, or left to its natural mode of growth. Colors, delicate rosy-lilac with white center, and pure waxy yellow. Very fragrant, and a long time in bloom. The seeds are enclosed in a husky covering, which remove before planting, and transplant to 1 foot apart. Half-hardy annual. Mixed colors. Pkt., 5c.

**ACROLINIUM, Everlasting Flower**—Stroh-Blume.—This is one of the most beautiful of the Everlasting Flowers. It is of strong growth, about 18 inches in height and bears a great number of pink and white daisy like flowers, with a yellow center. Mixed colors. Pkt., 5c.

**ADONIS. Pheasant's Eye**—Aoniszröschen.—Very brilliant scarlet flowers. The foliage is pretty, delicate, and many parted. It will grow readily in a shaded place, under a tree, or by the fence, and requires no extra care in planting and cultivating. Hardy annual, one foot high. Pkt., 5c.

**AGERATUM.**—A Mexican flower of a brush-like appearance, desirable in the garden, and prized by florists, because it bears a great many flowers, and keeps in bloom a long time; and it is, therefore, desirable for bouquet making, for which purpose we have but few better flowers. It blooms constantly all summer. Grows 1½ foot high, and plants should stand 2 feet apart. Colors, light blue and pure white. Start the seeds under glass, or sow in open ground, and transplant. Hardy annual. Pkt., 5c.

**AGROSTEMMA.**—A bright little pink-like flower, of deep crimson with light center, produced on long slender stems. The plant is branching, rather dwarf, and pretty for edging. Also called "Mullein Pink." Hardy perennial. Pkt., 5c.

**ALYSSUM. Sweet**—Steinfräut.—A desirable hardy annual, flowering from early spring until killed by frost. Flowers pure white. Pkt., 5c.

**ANTIRRHINUM. Snap Dragon**—Löwenmaul.—The Antirrhinum, perhaps better known by its old and popular name, Snapdragon, is an old favorite border plant, with dark and glossy leaves, and large and curiously shaped flowers, with finely marked throats. They have been much improved by careful selection, and are now really magnificent flowers. They will blossom the first season from seed sown in the spring, but the blossoms will be much stronger the second season. Succeeds best in dry, loamy soil. Tender perennial, two feet high. Mixed colors. Pkt., 5c.

**ASTERS**—Aster.—This splendid class of plants is not only one of the most popular but also one of the most effective of our garden favorites, producing in profusion, flowers in which richness and variety of color are combined with the most perfect and beautiful form. For flower beds and mixed borders it stands unrivalled, hardy annual.

**Sample's Finest Mixed.**—A new branching, long-stemmed Aster. Pkt., 10c.

**Paony Flowered Mixed.**—Beautiful large flowers, all colors. Pkt., 10c.

**White Rose.**—A pure white Aster. Fine for bouquets. Pkt., 10c.

**German Quilled Mixed.**—All shades. Pkt., 5c.

**Dwarf Bouquet Mixed.**—A splendid mixture. Pkt., 5c.



Sweet Alyssum.





Bartonia Aurea.

Camellia Flowered  
Balsams.

Cockscomb.



Cosmos.

**BACHELOR'S BUTTON**—Kornblume. — A perfectly hardy border plant, old fashioned, but very popular. Perennial, blooming the first season. Mixed colors. Pkt., 5c.

**BALSAMS.** Lady Slippers—Balsaminen.—Highly colored and free bloomers. By transplanting them once or twice the flowers are apt to be more double. Hardy annuals, growing two feet high.

**Camellia Flowered.**—Extra fine fixed. Pkt., 10c.

**Double Mixed.**—A good assortment. Pkt., 5c.

**Camellia Flowered White.**—A pure white, double blossom, very choice. Pkt., 10c.

**BALSAM APPLE.**—Very curious trailing vines with ornamental foliage, the fruit of which, when used in liquor, makes an excellent liniment for cuts and bruises. Plant outside when the ground has become warm. Pkt., 5c.

**BARTONIA, Aurea.**—One of the most showy of our hardy annuals. The plants grow 18 to 24 inches high with thistle-like downy leaves, begin to flower early and continually. Flowers saucer-shaped, 2½ inches across, and of a bright metallic yellow. Pkt., 5c.

**BROWALLIA.**—Handsome, profuse blooming plants, covered with pretty blue and white blossoms throughout the whole summer. The plants are quite minute when they first come up and should be protected from the hot sun, or they will be destroyed. Half-hardy annual; 1½ ft. high. Pkt., 5c.

**CADENDULA Meteor.** Pot Marigold. — Free flowering plants of easiest culture, succeeding everywhere, and blooming continually. Extremely showy, having double flowers of large size and intense glowing colors. Pkt., 5c.

**CALLIOPSIS**—Schöngesicht. — Showy, free blooming bedding plants, producing numerous rich colored flowers, sometimes called Beautiful Eye. Annual, mixed colors of every shade. Pkt., 5c.

**CANNA, Indian Shot.**—Distinguished by the luxuriance and diversity of color of their foliage, but above all by the size and brilliancy of hue in their flowers.

**Crozy's Finest Mixture.**—Pkt., 10c.

**CANDYTUFT**—Schleifenblume. — Favorite plant of the easiest culture, useful for growing in beds or masses, bloom long and freely. Hardy annual.

**White.**—Large, pure white trusses. Pkt., 5c.

**Mixed Colors.**—Fine, sweet scented, very popular. Pkt., 5c.

**CANTERBURY BELLS**—(Campanula) — Glockenblume. — Flowers large and bell-shaped. Succeeds best in light, rich soil. Pkt., 5c.

**CRYSANTHEMUM.** — Flower freely during summer and fall months. Pkt., 5c.

**CLARKIA.**—The flowers are very pretty and of many colors, single and double; hardy annuals, 1½ ft. high. Pkt., 5c.

**COCKSCOMB.** Celosia—„Hahnenkamm". Annual plants, tropical origin and one of the most showy. Pkt., 10c.

**COLUMBINE.** — Finest colors. It grows wild in most every temperate country in the world, and called by children the Wild Honeysuckle. The old single varieties of Columbine have been known and admired for centuries under the name of Honeysuckle. The new double sorts are very beautiful, and embrace a great variety of colors and forms. They are nearly all hardy, and seed can be sown in open ground in spring or autumn, and they can also be increased by dividing the roots. Hardy perennial; 2 feet high. Pkt., 5c.

**COSMOS.** — Annuals growing to the height of 7 feet, with masses of elegant foliage and star-like flowers of all colors. Pkt., 5c.



Calliopsis.



Canterbury Bells.



CANDYTUFT.







**HELICHRYSUM**—Everlasting Flower—*Strohblume*.—Pkt., 5c.

**HOLLYHOCK**—*Malbe*.—Very double and fine, mixed colors. Pkt., 10c.

**ICE PLANT**.—Handsomed and curious plants for hanging baskets, rock work, vases and edges. The leaves and stems are succulent and fleshy, and appear as though covered with ice crystals, and look like rock candy. The whole plant is peculiarly brilliant in the sunshine. The flower is white and not conspicuous. Succeeds best in dry, sandy loam and especially in a warm situation. Can be grown in pots or open border, the former having preference. Tender annual trailer; 6 inches high. Pkt., 5c.



Helichrysum.



Mignonette.



Mourning Bride.



Phlox.

**LANTANA**.—Finest French Hybrids.—Popular and very rapid growing, free flowering plant, with large heads of variously colored flowers, which emit a powerful aromatic perfume, and are continually changing their color. The plants form bushes, and during the summer months are completely loaded with blossoms, which are succeeded by green berries, which, when ripe, turn to a deep blue. Start the plants in hotbed or greenhouse, and protect from frost. Tender perennial; 2 feet high. Pkt., 5c.

**LARKSPUR**. Perennial—*Rittersporn*.—Very ornamental, combining the greatest variety of brilliant colors with duration and profusion of bloom. Pkt., 5c.

**LOBELIA**. *Gracilis*.—Fine for pots, hanging baskets and vases. Pkt., 5c.

**LUPIN**.—*Sun Dials*.—An elegant species of this old favorite flower, with large spikes of pea-shaped blossoms, white shaded with yellow, blue and purple. Looks well as a back ground to other lower growing annuals. The seed should be planted where they are to remain, in spring, and thinned to one and one-half feet apart. Hardy annual. Mixed colors. Pkt., 5c.

**LYNCHIS Chaledonica**—*Brennende Liebe*.—(Burning Star).—Blossoms of an intense, bright scarlet. Pkt., 5c.

**MARIGOLD**—*Sammetblume*.—Well known free flowering plants, with double flowers of rich and beautiful colors, half hardy annuals, 1 foot high. Pkt., 5c.

**MIGNONETTE**. *Grandiflora*—*Nejeda*.—A well known favorite that continues to bloom and send forth its sweetness all the season; hardy annual. Pkt., 5c.

**MOURNING BRIDE**.—The Sweet Scabious is not so generally cultivated as it deserves. The perfectly double flowers are fine for cutting, they are gracefully borne upon long slender stems, well above the foliage. Handsome flowers in hemispherical heads of exceeding sweetness. The colors are deep and light purple, scarlet, pure white and a dark mulberry red; some of the dark shades are tipped with white. With proper protection the roots will bloom 2 or 3 years. They are very useful for bouquets, as their long stems work in easily, and their striking color as well as fragrance are desirable. Hardy annual; 1 to 2 feet high. All colors. Pkt., 5c.

**NICOTIANA**. *Giant*.—Tender annual. Five feet high. Magnificent sub-tropical ornamental foliage and flowering plants for the lawn or borders. Pkt., 10c.

**NOLANA**.—A handsome trailing plant, with small, bell-shaped flowers of delicate shades of blue, marked with yellow and white; fine for hanging baskets, rock work and beds. Choice mixed colors. Pkt., 5c.

**PETUNIA**.—Charming free flowering effective plants of easy culture, tender perennials, choice mixed. Pkt., 5c.

**PHLOX**. *Grandiflora*—*Glommenblume*.—Choice mixed drummonds. Pkt., 5c.

**Phlox**. *Star of Quedlinburg*. A very striking novelty. Dwarfier than the *Phlox Grandiflora*. Flowers star-shaped; assorted colors. Pkt., 5c.

**PINKS**. *Chinese Double Mixed*—*Gartennelle*.—Well known favorites; their neatness and beautiful colors can hardly be surpassed; they are easily raised from seed and delight in a mellow, sandy soil. Pkt., 5c.

**POPPY**—*Mohn*.—A genus of showy free-flowering plants, producing a rich and effective display; choice mixed double. Pkt., 5c.

**Tulip Poppy**.—Very attractive. Pkt., 5c.



Hollyhock.



Ice Plant.



Nicotiana.

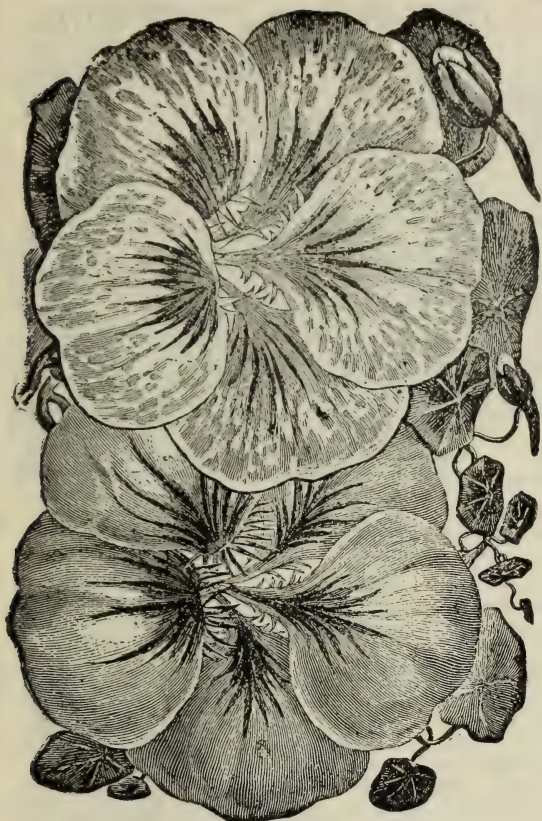


Poppy.



Petunia.





Nasturtiums.

**SALVIA. Scarlet Sage.**—A handsome and very free-flowering species. Sow in sandy loam, on a slight hot-bed, early in March; prick out when strong enough, either on a hot-bed or in small pots of loam and peat, and when well rooted harden off and plant out in May. Pkt., 5c.

**SENSITIVE PLANT.**—An interesting and curious plant, with globular heads of pink flowers, well known for the extreme irritability of its leaves and foot stalks, which close and drop at the slightest touch; tender annual; 2 feet high. Pkt., 5c.

**AMATEUR FRUIT GROWING.** This is a splendid guide for all those who have not made a study of fruit growing and wish to follow a course of instruction that will insure successful results. This book deals with only the common practices and the simple methods of fruit culture. An excellent book for the amateur. Plain, straightforward fruit talk—25 cents,



Portulaca.

**SWEET SULTAN.**—Handsome border plant, of easy culture, bearing very fragrant, double white, pink, and deep purple blossoms, from July to October. They produce a striking effect in mixed borders, and are extremely useful for forming bouquets of cut flowers in connection with other colored flowers. Plant where required in spring, and thin to 6 inches apart. Hardy annual; 2 feet high. Pkt., 5c.

**NASTURTIIUM. Tropaeolum** — Kapuzinerkresse. These will always be valuable summer flowers. They stand any amount of heat and drought. They will flower better however, in a poor, rocky soil, as a rich one has a tendency to make them run "to leaf." Hardy annual. Cultivated both for use and ornament. The seed-pods and foot-stalks are gathered green and pickled in vinegar; resembling capers. The Tropaeolum, or Nasturtiums, are among our very cleanest and prettiest and best climbers. The flowers are beautiful orange-colored and used for garnishing, the leaves for mixing with salads. Sow in drills about an inch deep, in light rich soil, when all danger of frost is over, and train the Tall on brush, trellises or fences, and the Dwarf in beds, or to form borders for the beds, which will make them look gay.

**Majus.**—Tall, all colors, mixed. Oz., 15c; Pkt., 5c.

**Minor.**—Dwarf, all colors, mixed. Oz., 15c; Pkt., 5c.

**PANSY.** Stiefmütterchen. — These lovely flowers are favorites with all, not only for the brilliancy and variety of their colors, but for the durability of their bloom. Seed may be sown in open ground in spring or summer, or in hot-bed early in spring. Young plants produce the largest and best flowers. The plants should always occupy a cool, partially shaded situation, and the ground cannot be too rich; coolness and moisture are necessary. Transplant when an inch high. Seed sown in July will blossom late in autumn; if sown in October, the following spring. Hardy biennial; 4 inches high.

**Black.**—A group of these present a fine appearance. Pkt., 10c.

**White.**—A delicate, pure white. Pkt., 5c.

**Azure Blue.**—Most beautiful. Pkt., 5c.

**New Superb.**—Very pretty. Pkt., 10c.

**Large Flowered Mixed.**—Extra choice. Pkt., 15c.

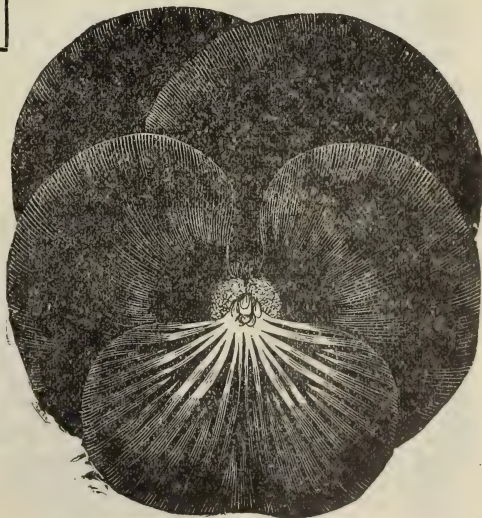
**Mixed.**—All shades. Pkt., 5c.

**German Mixture.**—A splendid selection of the various shades. Pkt., 10c.

**PORTULACA. Moss Rose**—Portulac Röschen. A popular strong-growing annual, delights in sandy soil; neither heat nor drought is too great for it.

**Double Rose Flowered.**—Mixed. Pkt., 15c.

**Single Mixed.**—Brilliant colors. Pkt., 5c.



Pansy.



**RICINUS.** Castor Oil Bean—Bunderbaum.—A tall, majestic, ornamental foliage plant with leaves of a metallic hue; tender annual. Pkt., 5c.

**SALPIGLOSSIS** — Trompetenzunge. — Very showy bedding or border plants, with richly colored, erect, funnel-shaped flowers. The colors are beautifully marbled and penciled, purple, scarlet, crimson, yellow, blue, and almost black. They are biennial in greenhouse, but annual in open ground. Start the seed in hot-bed (or do well if sown in the open ground), and transplant 1 foot apart, into a mixture of loam and sand, with well rotted horse manure at the bottom. Bloom from August to October. Tender annual; 1½ to 2 feet high. Pkt., 5c.

**SCHIZANTHUS**, or Christmas Orchid Flower. — A beautiful tribe of plants for out of door decoration. Easily cultivated; of bright colors, and useful for bouquets. The Schizanthus may be treated as half-hardy annuals, and do well in the house or open ground. Indeed, those plants that have flowered in the garden may be removed to the house in autumn. Two to three feet in height and bear hundreds of flowers. Pkt., 5c.

**STOCKS.** Gillyflower—Leibföhen.— Exceedingly valuable plants, producing an abundance of flowers of various shades and colors, and of the most delicate fragrance.



Schizanthus or Christmas Orchid Flower.

**Dwarf German Ten Weeks.**—Good mixture. Pkt., 5c.

**Fine Mixed Ten Weeks.**—Extra Choice. Pkt., 10c.

**SWEET WILLIAM**—Bartineffe.—These plants when in full bloom present a beautiful sight, and for a fine display are unsurpassed; hardy perennial, blooming free the first year from seed.

**Single Mixed**—Pkt. 5c. **Double Mixed**—Pkt. 10c.

**THUNBERGIA**—Height four feet. A trailing or climbing plant, with flowers of various shades of yellow and white, having a dark center or eye. Finely adapted for vases and hanging baskets, for piazza decoration. The seeds start slowly, and should be sown in a hot-bed, or in a box in the house, giving plenty of moisture and heat. Do finely planted out in open beds, without trellis support, covering the ground with their handsome foliage and bright blossoms. Pkt., 5c.

**VERBENA**—Eisenkraut. — A very effective bedding plant. Flowers fine for bouquets; half hardy perennial, blooming the first season from seed.

**Grandiflora.**—Saved from the choicest and most perfect flowers and best colors. Pkt., 10c.

**Fine mixed.**—A good mixture. Pkt., 5c.

**VIRGINIA STOCK.**—Free flowering annuals of easy culture, with flowers of red, white, rose and the new marbled varieties; splendid for edgings. Pkt., 5c.

**WALL FLOWER.**—The flower spikes are of great substance, very full, rounded at the top, of a handsome gold-red color, and unusually rich, sweet fragrance. Sow early in spring and it will bloom till frost. If sown in autumn it will bloom in spring. Pkt., 5c.

**ZINNIA** — Zinnia. — A grand genius of autumn flowering plants, comprising the greatest richness and diversity of color with unequalled profusion and duration of bloom. Half hardy annual.

**Double Mixed.**—Grows 1½ feet high. Pkt., 5c.

**Zebra Zinnia.**—The flowers of this beautiful new strain are full double, finely shaped with the great variety of colors known in the Zinnia, and a large proportion are brilliantly striped with beautiful contrasting colors, covering the plant in profusion. The flowers remain in perfection a long time; the plants begin to bloom in July and continue until frost. Sow in open ground, in May; when large enough to handle, transplant to 2 feet apart in the row. Pkt., 5c.



Verbena.



Ricinus.



Wall Flower.



Virginia Stock.



Salpiglossis.



Zinnia.



Sweet William.





## SWEET PEAS

There is no flower grown that is more popular, or that is more admired by all than the Sweet Pea, with its dainty colors and delicate perfume. The following list has been carefully selected and will be found to cover the entire range of colors and shades.

**Blanche Burpee.**—Pure white, of largest expanded form and great substance. Free flowering in clusters of three to four on long stems. Pkt., 5c.

**Emily Henderson.**—Fine white; not quite so large as the above, but a little earlier. Robust growth. Pkt., 5c.

**Sadie Burpee.**—Flowers of very largest size and purest snowy white. One of the finest of all. Pkt., 5c.

**Aurora.**—Flowers very large and of expanded form; three on a stem. Ground silvery white, beautifully flaked with bright orange salmon. Pkt., 5c.

**Dainty.**—Beautifully formed large flowers, when first opening are white, but change quickly to white with pink edge. A charming sort. Pkt., 5c.

**Stella Morse.**—A faint tinge of pink underlying cream, producing true apricot shade. Splendid for bunching. Pkt., 5c.

**Katherine Tracy—Rose Pink.**—Splendid, large, open flower, good substance and color, a vigorous grower and free bloomer. Pkt., 5c.

**Mrs. Joseph Chamberlain.**—Flowers enormous, three to four on a stem. White ground, heavily striped and flaked with bright rose. Excellent sort and very profuse bloomer. Pkt., 5c.

**Mars.**—One of the best and largest scarlet flowers of good substance and free-flowering. Pkt., 5c.

**Salopian.**—Beautiful, rich, deep-glowing crimson, tinged with orange-salmon. Flowers large grandiflora form. Pkt., 5c.

**Monarch.**—Standard maroon purple, tinged with indigo; wings velvety purple. Pkt., 5c.

**Othello.**—One of the best deep maroons. Pkt., 5c.

**Pink Cupid.**—Dwarf, growing only six inches high. Bears generally three and sometimes four flowers to a stem. Blossoms, pink standards, wings a faint rose. Pkt., 5c.

**White Cupid.**—The flowers are pure white, of good substance, and are very sweet. Pkt., 5c.

**Eckford's Choice Mixture.**—Contains all the leading varieties and is a beautiful assortment. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

**Fine Mixed.**—All shades. A good mixture. Oz., 5c; ¼ lb., 15c; lb., 35c.

**KOSS' SPECIAL MIXED.**—An unsurpassed mixture, combining every shade and type. It is made up of named sorts only, all choice, large-flowering sorts, the colors being distributed as evenly as possible throughout. For diversity of color, size of flowers and beautiful forms, this mixture is unexcelled. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c.

### WILD FLOWER GARDEN.

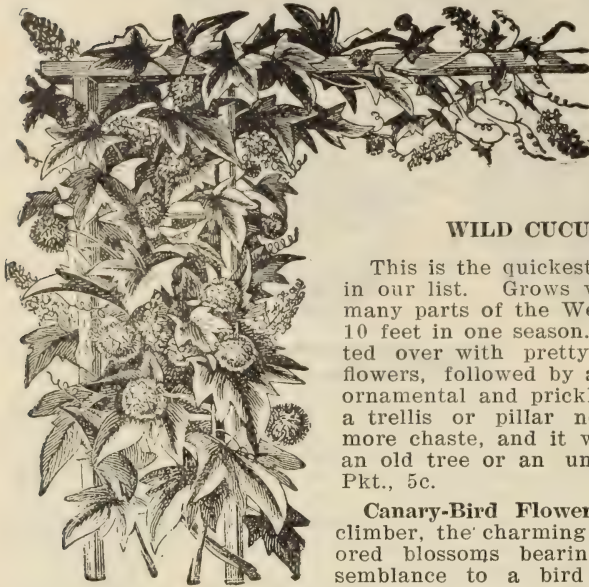
**Mixed Seeds.**—The "Wild Garden" for its unusual and varied effects, cheapness, and the small amount of labor necessary for its construction, has no rival. The "Wild Garden Seeds" are a mixture of the different hardy flowers, thus insuring on account of the different seasons of bloom, something new almost every day. Pkt., 5c; oz., 20c; ¼ lb., 60c.



Cupid Sweet Peas.



## A PAGE OF USEFUL AND BEAUTIFUL VINES.



## WILD CUCUMBERS.

This is the quickest growing climber in our list. Grows wild, self-sown in many parts of the West. It will grow 10 feet in one season. It is thickly dotted over with pretty, white fragrant flowers, followed by an abundance of ornamental and prickly seed pods. For a trellis or pillar no annual vine is more chaste, and it will quickly cover an old tree or an unsightly building. Pkt., 5c.

**Canary-Bird Flower.** — A beautiful climber, the charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings half expanded. The plant has a fine,

luxuriant, rambling character, and if the seeds are planted by the side of an arbor or trellis to run upon, it will run 20 feet high and blossom from July till frost comes. The flowers will be more numerous and brilliant in light, moderately rich soil. Tender annual climber; 20 feet high. Pkt., 5c.

**Cobaea-Scandens.**—A magnificent rapid growing climber with beautiful foliage and large bell-shaped purple flowers; trained on piazzas, arbors, etc., the offset is grand; half hardy perennials, often attaining a height of 20 feet the first season. Pkt., 10c.

**Hyacinth Bean—Dolichos lablab.**—Splendid climber. Purple and lilac flowers. Splendid climber, lilac with abundant clustered spikes of purple and lilac flowers, which are followed by exceedingly ornamental seed pods. It is of rapid growth; and often runs 20 feet in a season. Plant the seeds where the plants are desired, after the weather has become warm, and cultivate like the common bean, only give support to run upon. Tender annual; 10 to 20 feet high. Pkt., 5c.

**Cypress Vine—Chrysopsis.**—One of the most elegant vines, with delicate fern-like foliage and beautiful star-shaped flowers. Tender annual. Mixed, scarlet and white. Pkt., 5c.

**Moonflower—Mondblume.**—Bears immense white flowers, five to six inches in diameter, with a five-pointed star in the center; the flowers open at dusk or earlier on cloudy days, at which time they are deliciously fragrant. Pkt., 10c.

**Morning Glory—Winde.**—A popular climber of free growth and beautiful flowers, too well known to need any description; mixed colors. Pkt., 5c.

**New Japanese Morning Glory.**—Gigantic flowers, magnificent foliage, exquisite new colors. Pkt., 10c.

**Passion Flower.**—A beautiful climbing vine, producing peculiar shaped flowers. Hardy perennial. Pkt., 5c.

**Gourds—Ziefürbiße.** — A great variety of curiously formed and market fruit; the vines are of rapid growth, and with luxuriant foliage, adapted for covering screens, arbors, etc. Pkt., 5c.

**SPECIAL OFFER**—One packet of each of the above ten Climbers for only 45 cts.

**Mixed Climbers.**—A mixture of many varieties of climbing plants which will produce the most gorgeous effect. When the space to be planted is limited this will save some expense in purchasing so many varieties. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 45c.



Cobaea Scandens.



Cypress Vine.



Ornamental Gourds.



Passion Flower.



## SUMMER FLOWERING BULBS.

I offer only a select list of choicest Summer Flowering Bulbs that can be grown easily by anyone under ordinary conditions. These will soon make a gorgeous display, flower the first summer and bloom and multiply season after season.

### DAHLIAS.

#### Novelties of Special Merit

**AUNT CHLOE** (Cactus).—Rich black maroon.

**BRITANNIA** (Decorative).—Deep shade salmon. Large and early.

**DELICATA** (Cactus).—Light salmon at base shading to a delicate pink.

**GALLIARD** (Cactus).—Rich glowing crimson.

**GENERAL BULLER** (Cactus).—Cardinal red with crimson shadings.

**ST. CATHERINE** (Cactus).—Deep yellow shaded red.

**VULKER** (Cactus).—Charming free-flowering yellow.

**WM. FAWCETT**.—Cream apple blossom and purple.

**20th CENTURY** (Single).—Giant crimson with white.

**GLOWING BEAUTY** (Semi-Double).—Crimson penciled white.

Price of the above named novelties, each 25c. dozen, \$2.50.

#### STANDARD DAHLIAS.

**A. D. LIVONI**.—The best and most profuse blooming, deep, pink. Show Dahlia in existence.

**BURLEIGH** (Fancy).—Crimson dotted white.

**CATHERINE** (Pompon).—Yellow, free flowering.

**FERN-LEAVED BEAUTY** (Fancy).—White striped with crimson.

**MRS. LANGTRY** (Fancy).—Purple changing to pink and cream towards the center.

**PRINCESS BONNY** (Show).—Free flowering, cream white.

**THOS. LISBON** (Fancy).—Lavender, pink-white center.

Prices of any of the above Dahlias, 15c each, per dozen, \$1.50.

### CANNAS.

**ALLEMANNA** (5 ft. high).—Yellow.

**BUTTER CUP** (3 ft. high).—Bright golden yellow.

**C. HENDERSON** (3 to 4 ft. high).—A beautiful glowing crimson.

**INDIANA** (5 ft. high).—Glittering golden orange.

**PILLAR OF FIRE** (6 ft. high).—A beautiful crimson.

**EGANDALE** (4 ft. high).—Bronze-leaved, currant-red flowers.

**CRIMSON BEDDER** (3 ft. high).—Bright red.

Price for dormant roots, 15c each, \$1.50 per dozen.

**MADEIRA VINE** (Mignonette Vine).—Beautiful free-climbing tuberous vine. Large tubers, each 10c; per dozen, \$1.00.

### GLADIOLI.

On account of the intrinsic merit alone the Gladiolus is entitled to the high rank it holds among flowers; but when it is considered, also, how easy is its culture, and for what a small sum a splendid assortment can be secured, it seems a matter of surprise that they are not found around every home.

3 for 10c; dozen, 30c.

**PRIZE GLOXINIA**.—Magnificent; will bloom in 6 weeks from the planting of the dry bulb. Bulbs, each 10c; 3 for 25c; 10 for 60c.

**GIANT BEGONIAS**.—Tuberous Rooted.—Very beautiful. The flowers, which are of brilliant color and large size, make a magnificent display through the summer. Single—Scarlet, orange, pink, white, yellow and crimson, each, 8c; doz., 80c. Double—Scarlet, orange, pink, white, yellow and crimson, each, 10c; ½ doz., 50c.

**TUBEROSE**.—Double Dwarf Pearl.—Much larger than the common Tuberose. Wonderfully fragrant. Notice, please, our very low prices. For large bulbs, each, 5c; doz., 35c.

Gladioli.

Pearl Tuberose.



**CALADIUM**. *Eculentum* (Elephant's Ear).—A grand tropical looking plant, growing 4 to 6 ft. high, producing leaves of immense size. A favorite for specimens on the lawn. Wants rich soil and plenty of moisture. Fine large bulbs. Each 20c; 3 for 50c.

### HARDY GARDEN PERENNIALS.

Once planted will thrive year after year. Give them a little covering in the fall. Prices include postage.

**PAEONIES**.—Double white, pink and red, each 25c.

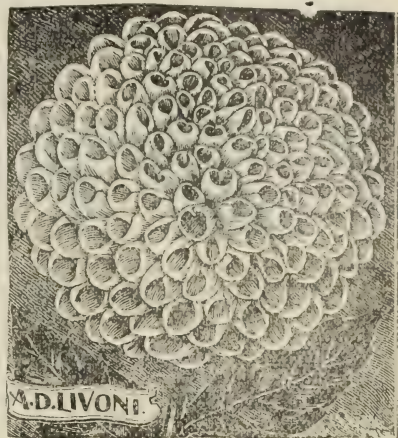
**BLEEDING HEART**.—Each 25c.

**IRIS**—German. Assorted colors, each 15c.

**IRIS**—Japanese. Assorted colors, each 20c.

**PHLOX**.—White, pink, red, etc., each 15c.

**RUDBACKIA PURPUREA**.—Giant pink daisy, each 15 cents.



Show Dahlia.

BE SURE AND INCLUDE AN ASSORTMENT OF THESE BULBS IN YOUR ORDER.





### Makes Flowers Flourish.

Flowers are like people. Their health depends upon their food. It must be *nourishing*, but not too rich to force growth and cause reaction. The one chemically correct flower food for house plants is

### Walker's Excelsior Brand.

It has no odor whatever, and can be used dry or dissolved in water for sprinkling. Use it and your flowers will flourish and their health will last.

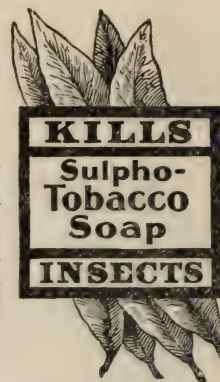
Small size (feeds 25 plants 6 months), 25c.; large size (enough for a year), 50c. Sent prepaid anywhere. With each package we send FREE the book, "How to Make the Window Garden a Success."

## Sulpho-Tobacco Soup.

A Wonderful and Inexpensive Insecticide.

Best Thing for House Plants and Ornamental Shrubbery.

Sulpho-Tobacco Soap is a powerful agent for the destruction of all bugs and insects. One or two applications will rid plants of the pests. Full directions with each cake. 3-oz. Cake (makes 1½ gals. prepared solution), 10c; postpaid, 13c. 8-oz. cake (makes 4 gals. prepared solution), 20c; postpaid, 28c.



**STERLINGWORTH DRY BORDEAUX MIXTURE.** Insecticide and Fungicide. Can be used with water as a spray or as a dusting powder. Full directions accompany each package. Price: 1 lb. box 30c, 5 lbs. \$1.25.

**STERLINGWORTH HELLEBORE.** Ground from pure, fresh, prime White Hellebore root, carefully cleaned before grinding. For leaf-eating insects. Price: ½ lb. box 15c, 1 lb. box 25c.

**STERLINGWORTH WHALE OIL SOAP with Tobacco.** Possesses all the valuable features of Whale Oil or Fish Oil Soap, and the additional insecticide values of tobacco, and can be used for any purpose for which Whale Oil or Fish Oil Soap is used, with doubly satisfactory results. Price: 1 lb. box 15c, 5 lbs. 60c.

**STERLINGWORTH KEROSENE EMULSION.** A valuable remedy against scale and all soft-bodied and sucking insects, such as plant lice, leaf aphids, woolly aphids, thrip, celery aphids, squash bug, leaf hopper, mealy bug, cabbage worm, etc. Very effective. Price: 1 pt. can 25c, 1 qt. can 40c, 1 gal. can \$1.00.



### HAMMOND'S

### SLUG SHOT.

**GARDEN INSECTS** frequently destroy large percentages of a year's crop and oftentimes totally ruin certain patches. Professor Green has made a very thorough study of these pests and their habits and gives many valuable remedies in his book "Vegetable Gardening" which we will send postpaid anywhere for 50c. 256 pages.

Used from ocean to ocean. Annual output, over 300,000 pounds every year for 20 years. A light, composite, fine powder, easily distributed by duster, bellows, or in water by spraying. Thoroughly reliable for killing currant worms, cabbage worms, lice, slugs, etc., and also strongly impregnated with fungicides. Cheapest and most effective remedy. Needed in every garden in America, during the growing time, to kill bugs and save foliage.

We sell large quantities of Slug Shot every year, and know it gives satisfaction to our customers. Price: 5 lb. package, 30c; 10 lbs., 50c; 100 lbs., \$4.50.

**PARIS GREEN.**—1 lb., 35c; 5 lbs., \$1.65.

**PURE BONE MEAL.**—An excellent fertilizer for lawns and gardens in general. 5 lbs., 20c; 10 lbs., 35c; 25 lbs., 75c; 50 lbs., \$1.35; 100 lbs., \$2.50.

Ask for our Special Catalog of **FARM AND GARDEN TOOLS.**

We can save you money on these goods.

**Feeding and Management of Live Stock.**—By Thomas Shaw, Professor of Animal Husbandry at the University of Minnesota. Strictly up-to-date and written in such manner that any one can get the facts without reading unnecessary matter. 8vo. 100 pages. Price, 50c.

**The Gold Mine in the Front Yard; And How to Work it.**—By C. S. Harrison. Everyone interested in flowers and ornamental shrubbery will want to read it. Bound in silk ribbed cloth, gold stamped with photo medallion on cover. 12mo. 100 pages. Illustrated. Price, \$1.00.

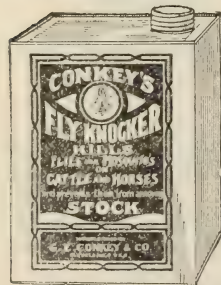
### BLATCHFORD'S CALF MEAL

gives better results than whole milk for feeding young calves, pigs, colts, lambs, etc. Every pound makes one gallon perfect substitute equal to whole milk. Raises or veals calves at half the cost of fresh milk. No filling, No mill feed. Every ounce just the best wholesome nutriment. Cooked and sold ready for use. Prevents scouring and insures early maturity. Feeding directions in every bag. One pound mixed with seven pints of boiling hot water, or four tablespoonfuls added to eight pints of sweet skim milk, makes a gallon of gruel as rich and nutritious as a gallon of fresh, whole milk, at a cost of 4c per gallon or less.

Prices: 100 lb. bag, \$3.50; 50 lb. bag, \$2.00; 25 lb. bag, \$1.00.

### CONKEY'S FLY KNOCKER.

Should not be confused with many worthless articles on the market which have done much to disgust the public and injure legitimate trade. I do not offer the cheapest article known, but just what I claim for it, and I guarantee it to satisfy you. Should it fail to do so, your money will be refunded. Conkey's Fly Knocker kills every fly it hits and keeps others from alighting on your horses and cows. Price: 1 qt. can 35c, 2 qt. can 60c, 1 gal. can \$1.00.



the best. It will do your money will be refunded. Conkey's Fly Knocker kills every fly it hits and keeps others from alighting on your horses and cows. Price: 1 qt. can 35c, 2 qt. can 60c, 1 gal. can \$1.00.



## GARDEN AND FARM REQUISITES.



Waters' Tree Pruner.

**Barrel Cart.**—For slops, water, potatoes, etc. An old kerosene barrel will fit into the frame. All the attachments are furnished. Price, without barrel, \$4.00.

**Hand Cart.**—Weight 80 pounds. Box 22x40 in. by 10 in. deep. Price, \$5.50.

**Corn Planter, Acme.**—A simple, reliable and well made planter. Price, 75c; with Pumpkin Seed Attachment, \$1.00.

**Dibbles.**—For planting cabbages, etc. Each, 50c; by mail, 60c.  
**Farm Bells.**—No. 1, diameter 12 in., weight 40 lbs. Price, \$2.00. No. 2, diameter 17 in., weight 50 lbs. Price, \$2.50. No. 3, diameter 19 in., weight 75 lbs. Price, \$3.75.

**Forks.**—Hand weeding, cast iron, each, 10c; by mail 15c. Imported steel, each, 25c; by mail, 30c.

**Garden Line Reels.**—Small, 50c; large, 75c.

**Garden Line.**—Per 100 feet, braided, 65c.

**Garden Hose.**—Prices on application.

**Grafting Wax.**—Per lb., 30c; by mail, 50c.

**Knives.**—English Pruning, single blade, each, \$1.50; two blades, each, \$2.00.

English Budding, ivory handle, each, \$1.00; two blades each, \$1.50.

Budding, cocoa handle, each, 75c.

Asparagus, chisel shape, each, 50c.

**Putty Bulbs.**—Scollays rubber, each 85c; by mail, 95c.

**Putty.**—Tremlow's Old English, semi-liquid. Per gallon, \$1.25.

**Glazing Points.**—Peerless (Van Reyper's), No. 2 for single thick glass, No. 2½ for double thick glass. Per 1,000, 70c; by mail, 85c.

**Plant Bed Cloth.**—For the protection of plants from frost, cold winds, heavy rains or scorching sun. Very durable. Per yard, 15c; per piece of 40 to 50 yards, per yard, 12½c.

**Seeders.**—Cahoon Broadcast. An excellent hand seeder, highly recommended. Price, \$3.00.

**Gem Hand Seeder.**—A handy little tool for small gardens or for sowing in hotbeds. Sows all kinds of seeds in drills. Price, \$1.00.

**Trowels.**—Ordinary garden, 6 in., each 12c; by mail, 20c; 7 in., 15c; by mail, 23c; 8 in., 20c; by mail, 28c.

English Steel Trowels.—6 in., each, 25c; by mail, 35c.

Cleve's Transplanting Trowels.—25c each.

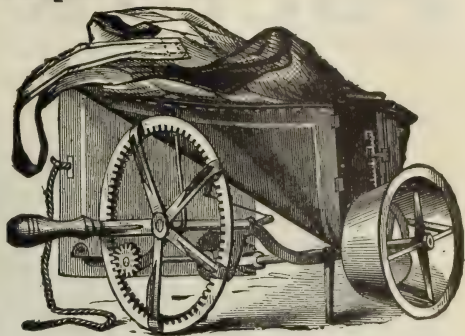
**Tree Pruners.**—Water's Improved. Length of pole, 4 ft., 50c; 6 ft., 75c; 8 ft., 90c; 10 ft., \$1.00; 12 ft., \$1.10.

**Weeders.**—Lang's. A first-class labor saver. 20c each, by mail, 25c.

Excelsior Weeders.—Each 10c, by mail, 15c.



Rubber Putty Bulb.



Cahoon Broadcast Seeder.



Barrel Cart.



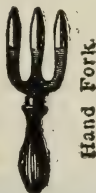
Hand Cart.



Acme Corn Planter.



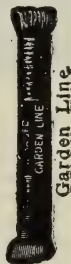
Farm Bell.



Hand Fork



Garden Line Reel



Garden Line



Excelsior Weeder.



Asparagus Knife.



Budding Knife.



Pruning Knife.



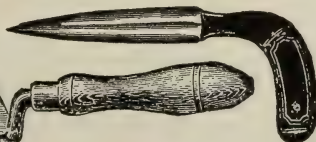
Budding Knife.



Lang's Weener.



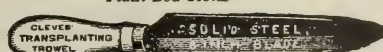
Garden Trowel.



Garden Dibble



Plant Bed Cloth.



Cleve's Transplanting Trowel.



# POULTRY SUPPLIES.

WE ARE AUTHORIZED AGENTS FOR

GENUINE **Standard Cyphers Incubators** PATENTED

(Look for Trade Mark—Demand the Label)



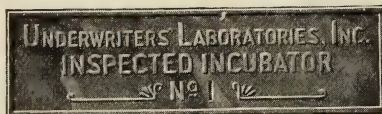
Practical poultry raisers who mean business and desire the greatest possible success should look for and **DEMAND** the qualities that have made Cyphers Incubators **WORLD FAMOUS**.

**FIRE-PROOFED  
INSURABLE  
SELF-VENTILATING  
SELF-REGULATING  
NON-MOISTURE  
EFFICIENT, DURABLE and  
POSITIVELY GUARANTEED.**

**FOR 1913** We offer our customers the Cyphers Company's complete line of incubators and brooders—the best on the market. For years the Cyphers Incubator has been consistently improved, always maintaining its leadership, until today it represents all that is most efficient, convenient and reliable in incubator construction.

**TO OWN A CYPHERS** is to have an incubator that stands first, not only because it has affixed to it the fire insurance label granted by the National Board of Fire Underwriters and bears a world-wide reputation, but because of the well established fact that it is the best hatcher of large, vigorous, livable chicks. It is positively guaranteed to out hatch any other make of incubator under widely-varying conditions, season after season, and to last ten years without repairs.

**DEMAND THIS LABEL**



**YOUR SAFETY**

Form of Brass Label (to be found in serial numbers)  
on every Standard Cyphers Incubator. All Sizes.

**THE PRINCIPLES OF CONSTRUCTION** that have made Cyphers Incubators "the world standard hatchers" for the last twelve to sixteen years remain unchanged in the 1913 pattern. Their patented features, their entire freedom from the bothers, disappointments and losses common to the "cheap" or "bargain" incubator, make these high-class machines the best for you to own first, last, and all the time. They are used with unequalled success in all parts of the civilized world, under every practical condition by men and women in all walks of life. They are money savers and money makers for poultry raisers who "mean business"—for men and women who want a real incubator with which to get out of poultry keeping all the profit and all the pleasure there is in it.

**CYPHERS INCUBATORS** have now been on the market seventeen years and today are used by more Government Experiment Stations, on more large, practical poultry plants, on more successful duck and egg farms and by a larger number of foremost poultry breeders than all other makes combined. For proof of these statements send to us for a copy of Cyphers Incubator Company's latest complete catalogue—1913 edition—now ready for mailing, free on request.

**EVERY STANDARD CYPHERS INCUBATOR IS GUARANTEED** by the manufacturers to do first-class work in the hands of every purchaser who will give it a fair trial and we hereby place our guarantee back of theirs. In buying a Cyphers you take no chances. Persons who earnestly desire to succeed in the poultry business should have the right tools with which to work. Write us today for free illustrated catalogue telling all about these superior hatching machines.

**SIZES AND PRICES OF CYPHERS FIRE-PROOFED INCUBATORS**

**FREE ON BOARD CARS, MILWAUKEE, WIS.**

No. 0 Holds 70 Hen Eggs.....\$15.00	No. 2 Holds 244 Hen Eggs.....\$32.00
No. 1 Holds 144 Hen Eggs.....22.00	No. 3 Holds 390 Hen Eggs.....38.00

**NOTICE:**—The above prices are factory prices. In buying of us you save on freight and also save valuable time. Goods are carried in stock by us the year around. Remember that time is money.

**Do Not Risk Life and Property** by operating cheaply-built incubators and fire-trap brooders! You need not take chances of this kind. Buy and use incubators and brooders that are built in conformity with the requirements of disinterested fire insurance experts, whose sole object in adopting such requirements was to reduce the fire hazard to the minimum, without interfering with the principles or efficiency of the machines. Remember that in this matter the interests of the associated fire insurance companies of the United States and Canada, and your interests are identical. Why not reap the benefit of the valuable work their experts have performed?



WE ARE AUTHORIZED AGENTS FOR

**Standard Cyphers Combination Brooders and Colony Roosting Coops.**

FIRE-PROOFED, INSURABLE, SELF-REGULATING

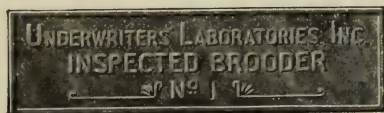
**For 1913** Cyphers Unequalled Apartment Brooders and combination roosting coops have the same important advantages over all other makes that are possessed by Cyphers Company's 1913 incubators, in that they are fire-proofed and insurable, having the first fire insurance inspection label ever granted on a brooder.

**CYPHERS 1913 BROODERS**, every size and style, are self-regulating, self-ventilating and varmint proof. The outdoor styles are useable also as colony coops for the growing chicks. They are easily and quickly converted into colony roosting coops by simply taking out the hover, which is made removable for that purpose.



STYLE B OUTDOOR BROODER.

(Three apartments. Safest and most popular "Foster mother ever designed.")



DEMAND THIS LABEL. YOUR SAFETY.

Form of Brass Label to be found (in serial numbers) on every Cyphers Brooder. All Sizes.

apartment. It has often been said by users of the Cyphers Brooders that

**THEY MOTHER THE CHICKS BETTER THAN A HEN.**

**AN IMPORTANT REASON** for this is found in the great practical advantage possessed by the entire line of Cyphers Brooders for 1913 in their self-regulating feature. For years the self-regulator was attached only to the highest priced Cyphers Brooder (Style C), but it was so well received that now it is attached to all the Cyphers Company Brooders. It automatically regulates the heat in the brooder underneath the hover at all times, whereas in brooders without a regulator the heat has to be governed by a continuous watching of the lamp and turning the wick up or down whenever more or less heat is required.

**IN ADDITION** to this unequalled line of brooders, we offer separately the Cyphers Company's world's challenge **Adaptable Hover**. This machinery-made, all-metal, guaranteed fire-proof heating and brooding device is suitable to be used anywhere that heat is required for brooding chicks or ducklings. It can be used in a roosting coop, colony house, shed, hen house, barn or other building with or without any additional enclosure for the chicks, or in a large goods case or organ or piano box.

Is pronounced by thousands of users to be the best device thus far invented for heating home-made brooders. Recommended especially for use in long brooding houses, one hover for each pen.

Adaptable hover is complete in itself, bears insurance label as a separate device, and is safe to use anywhere. Weight, boxed for shipment, only 40 lbs.

**COMPLETE CATALOGUE** for 1913 contains fully illustrated description of the Self-regulating, fire-proof hover, also of the entire line of Cyphers apartment brooders.

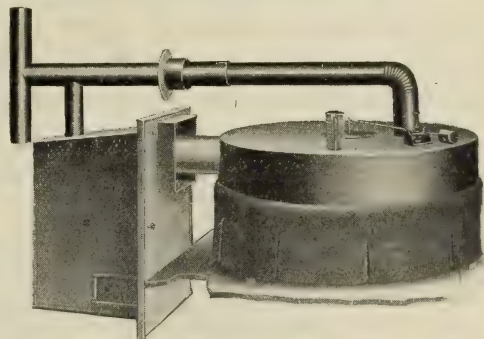
**SIZES AND PRIZES OF CYPHERS ADAPTABLE HOVER AND COMBINATION BROODERS**  
**FREE ON BOARD CARS, MILWAUKEE, WIS.**

Adaptable Hover, Capacity 75 Chicks . . . . .	\$ 8.50
Style A, Two Apartment Outdoor Brooder, Capacity 75 Chicks . . . . .	12.50
Style B, Three Apartment Outdoor Brooder, Capacity 100 Chicks . . . . .	16.50
Style C, Three Apartment Outdoor Brooder, Capacity 100 Chicks . . . . .	18.50
Style D, Two Apartment Indoor Brooder, Capacity 75 Chicks . . . . .	11.50

**NOTICE:**—The above prices are factory prices. In buying of us you save on freight and also save valuable time. Goods are carried in stock by us the year around. Brooders shipped knocked-down at low freight rates.

Insurable brooders, both outdoor and indoor, any one of which could be used anywhere, at any time, without objection on the part of the fire insurance companies and without danger to the property of the policy-holding operator is what we offer our customers by the invention of the Fire-Proofed Brooder Heater and Standard Adaptable Hover, which is used in every Cyphers Company 1913 Brooder, and which bears the Fire Underwriters' "Inspected Brooder" label.

Turn to the last cover page and note illustration and descriptive matter of the Cyphers Company's **NEW PORTABLE HOVER**.



ALL METAL ADAPTABLE HOVER.

(Self Regulating and Bears Insurance Label as Separate Device.)



**CYPHERS LARGE SIZE COLONY HOUSE.**

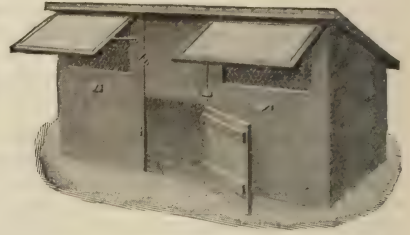
**For Growing Stock on Range, and for Use with Adaptable or Portable Hovers or Fireless Brooders in Raising Day-Old Chicks to Time of Separation.**

This Portable Colony House is 3 x 6 feet in size, is 36 inches high in front and 24 inches high at the back. It is built of a high grade of  $\frac{7}{8}$ -inch dressed lumber, tongued and grooved, and is put together in a thoroughly workmanlike manner. The bottom is of matched boards laid on cleats and is removable, making it easy to set the main coop to one side, thus rendering the cleaning of it much less burdensome than is the case with houses that have stationary floors.

The Cyphers Colony House (shipped in knock-down shape) is built in sections and is easily put together. A door, in two sections, 17 inches wide and 34 inches high, gives the caretaker free access when necessary. The adjustable hoods offer protection against the sun and rain, and during cold weather they may be lowered flat against the front.

In addition to its use for growing chicks, the Cyphers Colony House makes one of the best single-pen breeding houses that has thus far been devised.

**Price of Cyphers Colony House: Each, \$12.00; in lots of six, each \$11.50.**

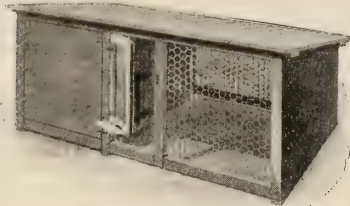


Cyphers Colony House or Roost Coop.

**CYPHERS MODEL BROOD COOP FOR RAISING CHICKS.**

**For Hen with Chicks, for Raising Day-Old Chicks and for Colonizing Growing Stock.**

The Cyphers Model Brood Coop is intended for a hen with chicks, but may be used as a home for the chicks long after they are weaned by the hen; also for day-old chicks that are being raised in warm weather without artificial heat; also for chickens old enough to be taken from the brooder and colonized out of doors.



Cyphers Model Coop for Raising Chicks.

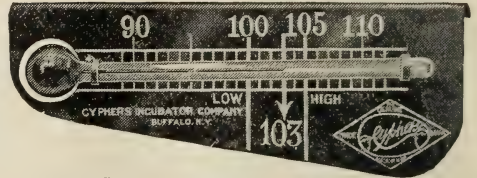
Cyphers New Model Brood Coop is 4 feet 6 inches wide, 2 feet deep, 1 foot 9 inches high in front, and 1 foot 3 inches high at the rear. As will be seen in the illustration, it has two apartments—a closed or house part, and a wire-enclosed shelter or exercise room. The house part—1 foot 9 inches x 2 feet—is provided with a removable floor, and is separated from the exercise room by a wooden partition with galvanized wire-cloth window and door which admit light and air. The exercise room—2 feet 6 inches x 2 feet—is closed at the end, and screened with fine-mesh galvanized iron wire back and front, providing a roomy shelter for the inmates. The combination door in the front of coop permits the chicks to enjoy the advantage of free range, while the mother hen is safely confined.

**Price of Cyphers New Model Brood Coop: Each, \$4.00; in lots of six, each, \$3.85**

**CYPHERS HIGH-GRADE TESTED THERMOMETERS.**

Hundreds of hatches in incubators fail because of inferior thermometers, and large numbers of chickens are killed in brooders for the same reason. The thermometers here listed are manufactured especially for us, and are thoroughly tested before they are shipped. Two-thirds of the thermometers on the market are made from improperly seasoned glass tubes. Our thermometer tubes are carried in stock two years before being mounted on the scale.

Incubator Thermometers, each, postpaid, \$0.65; two, postpaid, \$1.20; twelve, by express, \$5.50. Brooder Thermometers, each, postpaid, \$0.50; two, postpaid, \$0.95; twelve, by express, \$5.00.



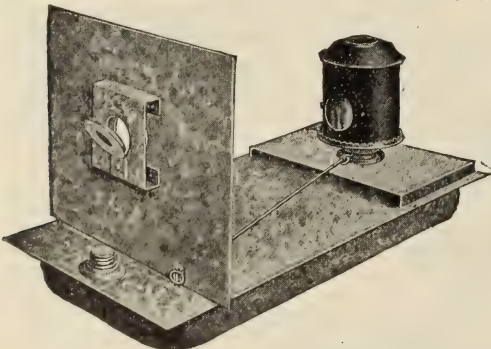
Cyphers Incubator Thermometer.

**IMPROVED-PATTERN INSULATED BROODER STOVE.**

Cyphers Insulated Safety Brooder Stove, invented for use in our 1908 Brooders, combines a heater proper, a burner equipped with metallic chimney, an insulating plate that serves also as a stove slide, and an upright plate of galvanized iron that forms the door to the brooder through which the stove is operated. (See illustration.) The flame can be adjusted without removing the stove.

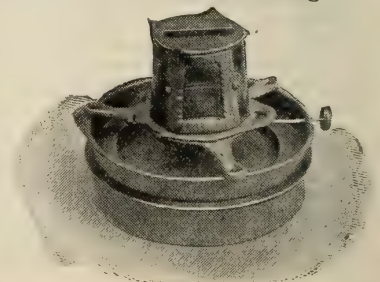
The heat of the flame is deflected away from the oil reservoir, and the oil remains cool at all times. This stove will burn forty-eight hours or more without refilling.

**Price of Cyphers Insulated Brooder Stoves, each, \$1.75.**

**CYPHERS SAFETY BROODER STOVE.**

The safety water pan on the Cyphers Safety Brooder Stove holds nearly a quart of water, and extends out over the entire surface of the oil bowl, thus placing a sheet of cold water between the oil bowl and the flame jets. We have sold many of these to persons who build home-made brooders and they give general satisfaction. Height,  $7\frac{1}{2}$  in.; greatest width,  $10\frac{1}{2}$  in.

**Price of Cyphers Brooder Stoves, each, \$1.75**





## THE "TYCOS" INCUBATOR HYGROMETER

The "Tycos" Incubator Hygrometer is not a regulator of moisture, but is an indicator of conditions, so that if not correct, they may be made so.

The illustration shows the correct position of the instrument in use, taking the place of one egg in the egg tray, thus showing the conditions actually surrounding the eggs. The glass bottle should be filled with clean water (rain or distilled water preferably) and the wick inserted and wet thoroughly, from end to end, before placing in the egg tray. The wick must be kept clean, otherwise the water will not draw up to the thermometer bulb. Should the wick become clogged, it must be replaced.

The use of the "Tycos" Incubator Hygrometer effectively lessens the percentage of chicks dying in the shell—due very largely to improper moisture conditions.

"Tycos" Incubator Hygrometer, with full instructions, each \$1.50. Extra wicks, 10c each.

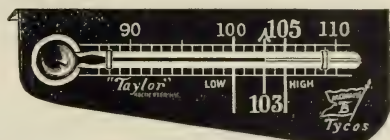


"Tycos" Incubator Hygrometer.

## "TYCOS" INCUBATOR THERMOMETER

Success in operating an incubator depends more upon the accuracy of its thermometer and the control of temperature than upon any other one feature. You will readily agree that the best incubator made, if furnished with an unreliable, inaccurate thermometer, is little better than any dry goods box for hatching chickens. Nothing so quickly shows up a poor incubator as a "Tycos" Thermometer—the kind that "tells the truth." Price 75c each.

"Incubator Thermometer Tips" is the title of a little booklet, which I should like to put into the hands of everybody that is interested in artificial incubation. Send for it—free.



"Tycos" Incubator Thermometer (half size)



## TAYLOR BROODER THERMOMETERS

Standard grade. Round wood frame, silvered brass scale, black filled figures and graduations, mercury tubes, approximate scale range 60 to 140 degrees F. Price 50c each.

## "OCULUM"

(Registered Trade Mark.)

Guaranteed by the Hancock Inoculum Co., Inc., Under the Food and Drug Act of June 30, 1906. No. 2880.

Scientific Remedy and Preventive for Cholera, Roup, White Diarrhea and Sore Head; also Cure for Gapes.

Two sizes, \$1.00 and 50c.

Inoculation will now enrich humanity by saving millions of fowls upon which man feeds for subsistence.

Fowls are subject to other diseases which Oculum does not profess to cure or prevent.

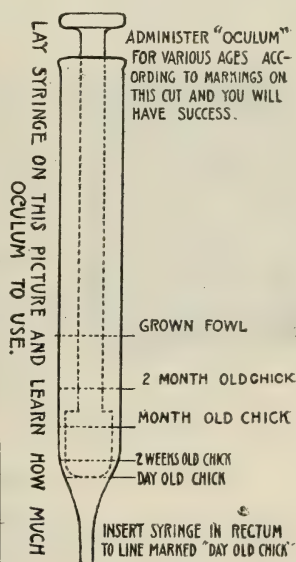
If your fowl is suffering from Cholera, Roup, White Diarrhea, Sore Head or Gapes, send for a bottle of Oculum with confidence that it will do its work thoroughly. Use it with discretion and you will be more than satisfied with results.

Oculum is administered through the RECTUM OF THE FOWL. The disease germ attacks the intestines of the fowls. Oculum destroys the germ. For inoculating, use the small syringe that goes with each bottle.

One \$1.00 bottle will inoculate 150 fowls and four times as many chicks.

## GLUTEN MEAL!

Yes, we have it. Excellent for mash feeding. Highly recommended by our Experiment Stations and by poultrymen who know. Price: 10 lbs. 30c; 25 lbs. 70c; 50 lbs. \$1.25; 100 lbs. \$2.25. Special prices on larger quantities.



## PERFECTION ADJUSTABLE SEAL BANDS.



removed without destroying the band. The Only Adjustable Seal Band manufactured. Price (postpaid): 12 for 20c, 25 for 35c, 50 for 60c, 100 for \$1.00, 250 for \$2.25, 500 for \$4.00.

The Perfection Adjustable Seal Band is just what the poultry raiser is looking for. A Seal Band that is Adjustable can be used on all classes of fowl, and cannot be





### CYPHERS X-RAY TESTER.



Cyphers X-Ray Egg Tester is designed for use on an ordinary hand lamp, and fits over any style of burner with a diameter approximating that of the tester. In a dark room the light will be found strong enough to penetrate the shell and illuminate interior of the egg.

Price of X-Ray Egg Tester, 25c each; postpaid, 35c.

### CYPHERS PRACTICAL EGG TESTER.

Cyphers Practical Egg Tester is the standard tester in use on large duck and broiler farms. Size 18 in. high, 10 in. wide and 10 in. deep. Equipped with an extra strong reflector. No chimney is furnished, because of the liability of breakage in shipping. An ordinary glass chimney, such as is used on a house lamp, will fit.

Price, complete (including box, lamp and reflector) .....\$1.25



### CYPHERS IMPROVED PEDIGREE EGG TRAYS.

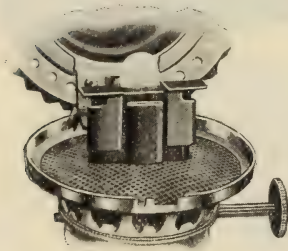
In our Nos. 0 and 1 Incubators, chickens can be separated into four lots; Nos. 2 and 3, eight lots. Pedigree Trays are not for use during entire hatch. The eggs should be placed in them when they are turned for the last time. These trays will fit the Cyphers only. In ordering pedigree trays, state style and size of machine and date of manufacture. If wanted for 1905, 1906, 1907, 1908, 1909, 1910, 1911 or 1912 pattern machines, state which is desired.

Prices: No. 0, each, \$2.00; No. 1, each, \$2.50; No. 2, per pair, \$5.00; No. 3, per pair, \$6.00.

### CYPHERS FLAME REDUCER.

The Cyphers Flame Reducer reduces the size of the flame on a No. 3 (large size) burner to that of a No. 1 (small size) burner and does this without changing the wick or burner in any manner. By the same process that this burner reduces the size of the flame it reduces the amount of oil consumed, saving more than fifty per cent. in cost of oil. Made in two sizes, large and small. In ordering mention width of wick.

Price of Cyphers Flame Reducer, either size, 25c; postpaid, 30c.



### CYPHERS COMBINATION BLUE-FLAME GAS BURNER.

Cyphers Combination Blue-Flame Gas Burner herewith burns with a blue flame and is equipped with an ingenious heat spreader that makes the heat effective as soon as it is produced. Made in two sizes, large and small.

Price of burner complete, ready to be attached to gas pipe or bracket, 50c; postpaid, 60c.

### FULL-NEST EGG FOOD.

A Meat Food Tonic Conditioner That Makes Hens Lay.

Full-Nest Egg Food is the standard condition powder for all ages of poultry. Besides being an unexcelled egg producer, it is a concentrated meat food possessing tonic properties which promote good health and fine condition. It stimulates and invigorates, but unlike other tonic foods, it also builds up the system and keeps it up.

Full-Nest Egg Food will help your birds through their molt, make the feathers develop normally and induce a high state of perfection in plumage. Hens begin laying sooner after molting where this egg food is used. Full-Nest Egg Food contains no injurious drugs or chemicals; it is safe and easy to use.

Full directions for use in every package.



Prices. 42-ounce package .....\$0.25  
25-lb. pail. .... 2.00

### HERE IT IS FOR \$4.00. No. 32 HAND GRINDING MILL.

A Great Big Hand Grinder

that will save its cost several times a year and will furnish one to two bushels per hour of fresh ground corn, oats, peas, dry bone, oyster shells, etc., for poultry feed. A child can operate it.

In this mill are embodied all the good features of other hand grinding mills to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. It is a well designed machine, is strong and well made throughout and of excellent finish, has a 16 inch fly wheel and is light running.

The capacity of this mill is not equalled by any other of the same size. Shipping weight, 40 pounds. Price: \$4.00.





## AUTO SPRAY NO. 1.

The Auto Spray No. 1 is the standard of all compressed air sprayers. It consists of a 4-gallon reservoir made of heavy material, either brass or galvanized steel as ordered. In this tank is inserted and locked a brass air pump which may be attached or detached by the simple shift of the cam.

Diameter.....7 Inches      Weight empty ..... 8 lbs.  
Height.....2 Feet      Weight loaded .....39 lbs.  
Capacity.....4 Gallons      Weight shipping .....13 lbs.

Sold under a positive guarantee to give satisfaction or money refunded. A self-operating or automatic compressed air sprayer. An excellent whitewashing outfit. This sprayer has nozzle, stop cock and fittings turned from solid brass, with deep cut threads, 3-ply rubber hose; the pump and valves are entirely of brass where they come in contact with the solution. All cast iron parts are malleable iron; the carrying strap is made of 8-ply halter web.

**Auto-Pop Nozzle** is a patented shut off device with self-cleaning attachment. Operating the lever opens or closes the valve and cleans the nozzle aperture automatically.

**Brass Strainer.** A great convenience in the preparation of solutions.

**The Torch.** For burning worm's nests. Burns kerosene oil vaporized with air, and the flame is so hot that worms are instantly destroyed.

**Extension Pipe.** Furnished in 2 ft. lengths of solid brass. Three lengths generally used for trees.

**Elbow Extension.** For spraying the under side of grapes, melons, etc.

**Two-Row Attachment.** For spraying two rows of potatoes, etc., at one passing.

## Prices:

"Auto-Spray," No. 1A, Brass Tank, with Stop Cock.....\$6.75  
"Auto-Spray," No. 1B, Brass Tank, with Auto Pop Nozzle... 7.65  
"Auto-Spray," No. 1C, Galvanized Tank, with Stop Cock.... 4.50  
"Auto-Spray," No. 1D, Galvanized Tank, with Auto Pop nozzle 5.40  
Brass 2 ft. Extension, per length..... .45  
Brass Elbow Extension, each..... .45  
Two-Row Attachment ..... 1.35  
Torch ..... .90  
Strainer for "Auto-Spray" No. 1, Solid Brass..... .90  
For use with Cattle Fly Oils and other oil preparations, we furnish, where so ordered, special oil hose, for which an extra charge is made of..... .45

## THE NO. 3-B AUTO SPRAY.

Will apply whitewash and cold water paints to any surface more rapidly and thoroughly than 10 men with brushes. No sprayer manufactured develops greater power, hence it will handle any solution that will work in any other sprayer—in fact, any liquid which can be formed into a spray. Whitewashing poultry houses, stables, cellars, factory walls, and so forth, are very simple operations with this "Auto-Spray" No. 3-B. Price, complete outfit, including 8 gallon galvanized tank, 8 feet of 3-ply discharge hose, 8 feet iron extension pipe, and latest pattern Vermorel nozzle, \$12.60.

## LITTLE GIANT SPRAY PUMP.

For Whitewashing, Window and Buggy Washing, Tree Spraying.

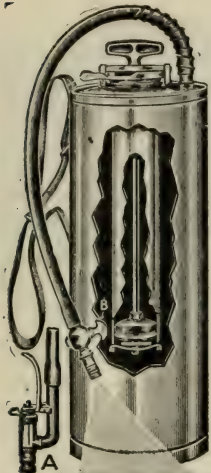
Many poultrymen have become tired of whitewashing their poultry houses in the old way—with a brush—and are looking for an effective spraying pump, at low cost, that will do the work satisfactorily and with far less trouble. We offer such a pump in the **Portable Brass Spray Pump** illustrated herewith. This pump has a brass cylinder and air chamber, hence will not corrode. It has a steel rod and is furnished complete with foot rest and discharge holes. It is designed to set in a pail or vessel of water with the foot rest outside. It is also arranged to discharge a fine jet in bottom of bucket. This answers the same purpose as an agitator, keeps the whitewash or other mixture thoroughly mixed, and is especially recommended for whitewashing, spraying trees, bushes, flowers, etc. Price, complete, \$3.75.

## NO. 37 AUTO SPRAY.

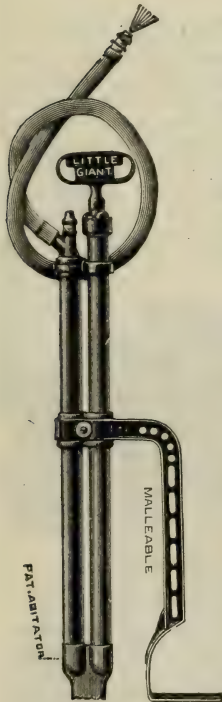
A compressed air sprayer. Made in two styles—glass or galvanized reservoir. A continuous and fine spray with half the pumping required on the old style atomizers. Will handle all solutions, insecticides and disinfectants. The construction of the tank permits the sprayer to be used at any angle. Two spray caps are furnished with each No. 37, one each for straight and angle spraying. Price with galvanized reservoir, 90c; with glass reservoir, \$1.00.

## TRI-JET SPRAYER.

A good, serviceable atomize sprayer. Excellent for spraying liquid lice killers, disinfectants, etc. Price 75c.



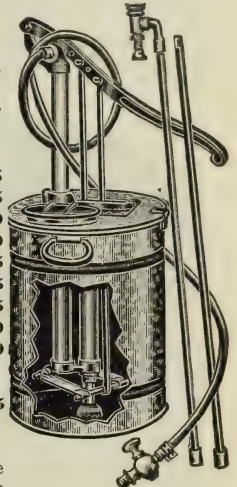
PATENTED.



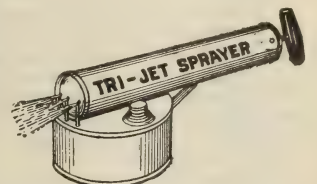
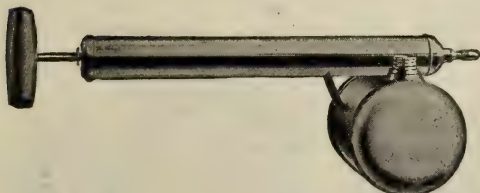
Little Giant.



Brass Strainer.



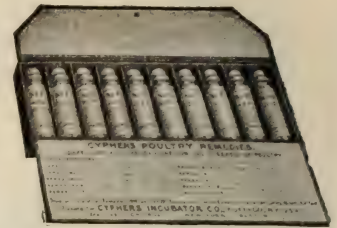
No. 3-B Auto-Spray.





**CYPHERS POULTRY MEDICAL CASE.**

Cyphers Poultry Remedies represent an armament sufficiently complete for combating all the common diseases of poultry and checking at the start any threatened epidemic. They are of the quality that has been used for many years in treating diseases of mankind. Equipped with the Cyphers Medical Case, the fancier or poultryman will be prepared to ward off diseases that may attack his flocks. The ten remedies are put up in a neat, strong, cloth-covered case. Each bottle is labeled, showing dosage and the disease which its contents will cure and prevent. Complete directions for use are attached to the lid of each case, and are printed on the label of each vial.



Remedy No. 1—For Catarrhal and Croupy Colds, Bronchitis, etc.

Remedy No. 2—For all sudden Colds, with watery discharge.

Remedy No. 3—For Chicken Pox, Bumble Foot and Catarrhal Colds with Croupy Cough.

Remedy No. 4—For Diarrhoea and Cholera.

Remedy No. 5—For Canker and Diphtheritic Roup.

Remedy No. 6—For Indigestion, Liver Diseases and Crop Bound.

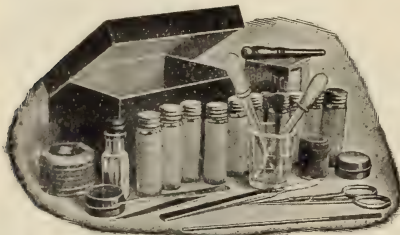
Remedy No. 7—For Egg-Bound, Eye Diseases and Promoting Action of Egg Organs.

Remedy No. 8—For Rheumatism and Cramps.

Remedy No. 9—For Worms and Intestinal Parasites.

Remedy No. 10—For Disorders of Egg Organs, causing soft-shelled eggs.

Price of complete set of ten remedies in cloth-covered case, postpaid, \$2.00. Single Vials, in strong, specially prepared mailing tubes, 25c each; postpaid, 27c each. Order separate Vials by number as given above.



Cyphers Poultry Medical and Surgical Case.  
Price, postpaid, \$3.00.

**CYPHERS POULTRY MEDICAL AND SURGICAL CASE.**

The unprecedented success of Cyphers Poultry Medical Case, combined with their knowledge based on practical experience of the requirements of average poultrymen, has prompted them to combine with that case a surgical outfit, containing such surgical instruments and little accessories as will be found helpful in the treatment of injuries, and combating diseases, epidemics, etc.

All instruments are of good quality steel, nickel plated and carefully finished. The entire outfit is put up in a handsome, strong, cloth-covered box. The remedies are packed in metal-capped vials, and are labeled to show their uses and the dosage in each case.



Cyphers Poultry Surgical Case.  
Price, postpaid, \$1.50.

**CYPHERS POULTRY SURGICAL CASE.**

For the convenience of our patrons who do not require the combined Medical and Surgical Case, we can supply the Cyphers Poultry Surgical Case, separately, as illustrated herewith, or the Cyphers Poultry Medical Case, as illustrated and described on this page.

Cyphers Surgical Case consists of the same instruments and accessories as are contained in the combined Medical and Surgical Case, with the exception of the ten remedies which are omitted.

Price of Cyphers Poultry Surgical Case, complete, postpaid, \$1.50.

**CYPHERS ROUP REMEDY—GUARANTEED.**

Cyphers Roup Remedy is the best cure for roup in all forms. It is thoroughly reliable and always uniform in quality and strength. Prevents and cures common colds, and for the cure of canker is without an equal. Pigeon growers as well as poultrymen will find this remedy of special value in the cure of all forms of canker in poultry and pigeons.

Cyphers Roup Remedy is used by simply dissolving the cure in the drinking water. In all early stages the sick fowls take their medicine in this easy manner. One small-size package will make 25 gallons of roup medicine.

Prices: Small-size package 25c, postpaid. Medium-size, 50c, postpaid. Large-size, \$1.00, postpaid.

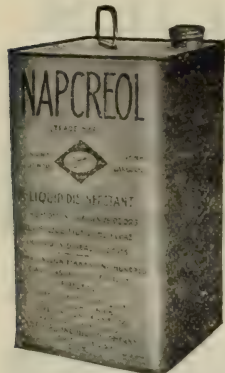
**CYPHERS REMEDIAL OINTMENT.**

For years there existed among our customers a widespread demand for a salve or ointment that could be used, without fear of injury, on the heads and under the wings of little chicks, young turkeys, etc., and that would destroy mites, lice and the larvae of eggs of these injurious pests. It is guaranteed to kill head lice on young chicks, which are highly destructive, and is equally good for scaly-leg, chicken-pox and other like diseases. May be applied safely with the finger or with a small brush.

Prices (postpaid): Small size, 25c; Large size, 50c.





**NAPCREOL.****A Fluid Disinfectant and Deodorant.****(Non-poisonous.)**

Napcreol is unexcelled for disinfecting poultry houses and runs, stables, dog kennels, toilets or any place where a good germ or odor destroyer is needed. One gallon will make 100 gallons of disinfectant.

It is a reliable home remedy for all germ diseases affecting poultry. Its use prevents disease. It will cure roup, diphtheria, cholera, chicken-pox, sore eyes, canker, scaly legs, favus and diarrhoea. It will destroy disease, germs, mange, parasites, fleas, mites, lice, ticks and worms.

Full directions for use on each can. Price: Quart can, 50c; half-gallon can, 85c; gallon can, \$1.50.

**CYPHERS LICE PAINT.**

Cyphers Lice Paint is a scientifically compounded preparation for killing lice, mites and other parasites on fowls, also for the lice and ticks on sheep, hogs, horses and cattle.

The vapor which arises from the paint is what does the work. The vapor is lighter than air and contains an odor which permeates the plumage, and while not obnoxious to persons or harmful to fowls or animals, is deadly to lice, mites and ticks. The easiest of any lice killer to apply, stronger (thus more effective), and therefore the most economical preparation for the purpose.

Prices: 1-qt. cans 35c, 2-qt. cans 60c, 1-gal. cans each \$1.00, 5-gal. wood-jacket can \$4.00.

**CYPHERS LICE POWDER.**

A common complaint has been that lice powders are only strong enough to drive lice but do not kill. As soon as the powder loses its strength the lice return to the hen and she is no better off than before. In offering Cyphers Lice Powder, we present a powder that is stronger than any other preparation. Contains no carbolic acid or other chemicals which will injure the fertility of eggs.

5 ounce package (trial size).....	\$0.10	Postpaid...\$0.15
15 ounce box .....	.25	Postpaid... .40
48 ounce box .....	.50	Postpaid... 1.00
100 oz. package (by express at customer's expense.)...	1.00	

**FUMIGATING CANDLES.**

If you want to kill disease germs in your dwelling—lice, mites and disease germs in your poultry houses, light one of these candles and close up the house or room tight for three or four hours. Be careful to remove all the fowls from the house or room, or they will be suffocated.

Complete, each, 15c; by mail, 25c; per doz., by express, \$1.25

**"SAVE-AL" GUARANTEED EGG PRESERVATIVE.****Will Keep Eggs in Good Condition from Six to Ten Months.**

Cyphers Save-Al Guaranteed Egg Preservative is a tasteless, colorless, odorless, non-poisonous fluid that, when dissolved in boiling water, makes an unequalled solution for preserving eggs. It is easy to use and absolutely sure. One gallon makes sufficient solution to keep 65 dozen eggs in first-class condition for ten months. Eggs preserved in Save-Al are superior in every way to the ordinary preserved, cold storage or limed eggs. The solution has been thoroughly and carefully tested, and critical observers have found it difficult to detect the difference between a fresh-laid egg purchased in the open market and eggs which have been put down in Save-Al from six to ten months. Save your eggs when they are plentiful and cheap, and by preserving them in Save-Al they will be in good condition for sale or for use

when eggs are scarce and high-priced. Price of Save-Al Guaranteed Egg Preservative, 1 gallon jugs, each, \$1.00.

**CYPHERS LICE-PROOF PERCH SUPPORT.**

Manufactured of cast iron and with ordinary care will last a lifetime. They are cheap in price easily put up and if once tried will always be used. They are attached with screws. The oil cup is covered with a cap to prevent an accumulation of dust. Fill each cup with Liquid Lice Killer or with ordinary kerosene oil. When the little cup contains the oil or lice liquid, it is impossible for lice to pass from the walls of the buildings to the roosts, or from the roosts to the building.

Prices of Wall Support: Per pair, 30c; postpaid, 65c; per ½ dozen single hangers, 90c; per dozen single hangers, \$1.75.

Prices of Upright Support: Per pair, 40c; postpaid, 90c; per ½ dozen single hangers \$1.10; per dozen single hangers, \$2.10.

**Wall Perch Support.****Upright Perch Support.**



# KOSS' PIGEON SUPPLIES.

## SANITARY PIGEON FOUNTAIN.

Pigeons cannot roost on it. Easily taken apart and cleaned. Pan is attached to top by strong spring-clip. Made of heavy galvanized iron.

Capacity two gallons. Price, \$1.25.



## CYPHERS PIGEON PERCHES.

Price: 10c each; \$1.10 per dozen.

## STONEWARE PIGEON BATH.

Thoroughly sanitary, glazed. A necessity for every pigeon breeder. Two sizes. 12-inch baths, 20c each; 16-inch bath, 35c each.



Pigeon Bath.

## STERLINGWORTH SALT CAT.

Sterling Salt Cat is a scientific combination of those aromatic and tonic properties contained in such seeds and roots as gentian, anise, coriander, etc., combined with sulphur, charcoal, limestone, salt, bone and other materials that are generally recognized by pigeon keepers as aiding digestion, promoting good health and egg production in pigeons and game fowls. 10c each, \$1.10 per doz.



Pigeon Nest Bowl.

## PIGEON NEST BOWLS.

These nests are moulded from clay and make an ideal nest for pigeons. Made in two sizes. 8 in. in diameter 8c each, per dozen 75c, 100 for \$6.00; 9½ in. in diameter 10c each, per dozen \$1.00, 100 for \$8.00.



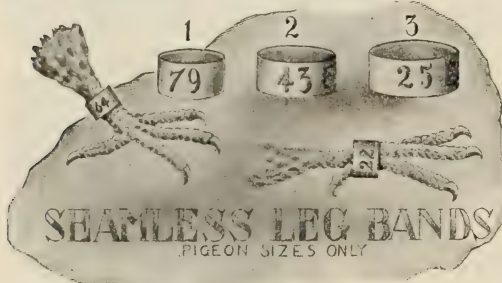
## STERLINGWORTH GOING LIGHT TABLETS.

Guaranteed to cure the dreaded disease known to pigeon keepers as "Going Light." Full directions on each box. Price, 25c.

## ALUMINUM PIGEON BANDS.

Our Seamless Pigeon Bands are made in three sizes as shown in illustration. Order by size number, 12, 25c; 25, 45c; 50, 80c; 100, \$1.40. Open, 12, 15c; 25, 25c; 50, 40c; 100, 65c.

Stamping of initials, year or special numbering extra. Ask for prices; specifying what you want on the bands and the quantity desired.

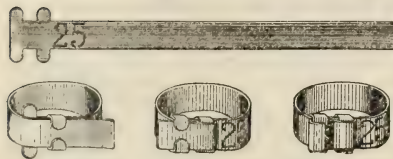


## DOUBLE CLINCH PIGEON BANDS.



Made in two sizes as shown in illustration. Price: Per 12, 15c; 25, 25c; 50, 40c; 100, 65c.

## PERFECTION ADJUSTABLE DOUBLE LOCK BABY CHICK OR PIGEON BANDS.



This band can be used on DAY OLD to TEN WEEKS old chicks. Also for PIGEONS. It is in every respect like the larger bands, except that they are made of lighter material, which makes them easy to adjust on the legs.

Price (postpaid): 12 for 15c; 25 for 25c; 50 for 40c; 100 for 65c; 250 for \$1.35; 500 for \$2.50.

## LONG'S PIGEON REMEDIES.

All of the following remedies are put up in 35c boxes. 3 boxes for 90c.

Long's Pigeon Lozenges, for Atrophy or Going Light. Long's Little Cough Tablets, for Coughs, Colds, etc. Long's Golden Roup Remedy, for Roup, Canker, etc. Long's Tonic Pills, for Gorged Crop or Indigestion. Long's Homer's Bracer, a Tonic for Homing Pigeons. Long's Diarrhoea Tablets, Diarrhoea and Disordered Crop.

Long's General Tonic for Loft, given in the water.

## FOUST'S HEALTH GRIT.

Stands pre-eminent alone, as the highest and only high class grit available to the breeder of high class pigeons. It contains peculiar and unique special properties which no other grit contains; properties whose functions appear to be the rearing of high-class youngsters, which are so difficult, under ordinary circumstances, to bring to full maturity. Price: 5 lbs. 20c, 10 lbs. 30c, 25 lbs. 65c, 50 lbs. \$1.15; 100 lbs. \$2.00.

## CYPHERS PIGEON FOOD.

The best and most satisfactory mixture of the best grains obtainable for this purpose. It is almost impossible for any fancier to purchase on the open market materials of this kind and quality and assemble them in proper proportions at as low a price as we offer Cyphers Pigeon Food.

Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 85c, 50 lbs. \$1.50, 100 lbs. \$2.75. Subject to change. We also have Canadian Flint Corn, Kaffir Corn, Canadian Peas, Hemp and Millet Seed, etc. Ask for prices of these, stating quantity you desire to purchase.



**CYPHERS KEEP-CLEAN WALL FOUNTAINS.****Widely Popular Style of Drinking Fount for Adult Fowls.**

These handy fountains are an original Cyphers Company product and give complete satisfaction. They are extra convenient to handle and are more sanitary than the ordinary fountains that stand on the ground or on the level of a poultry house floor where they are soon kicked full of litter and different forms of dirt.

Made of the best galvanized iron, and guaranteed to last many years with proper treatment. We recommend them as first-class in every particular.

Prices: One-gal. size, each, 50¢; per ¼ doz., \$1.40; per ½ doz., \$2.70; per doz., \$5.00. Two-gal. size, each, 75¢; per ¼ doz., \$2.20; per ½ doz., \$4.20; per doz., \$7.80. (By freight or express.)

**CYPHERS SEPARABLE DRINKING FOUNTAINS.****Low-Priced—Easy to Clean—Will Last Many Years.**

The water supply is the medium that sometimes conveys contagious diseases from one fowl to another. For example, water in the drinking vessel is liable to come in contact with and be infected by the discharges from the nostrils of ropy

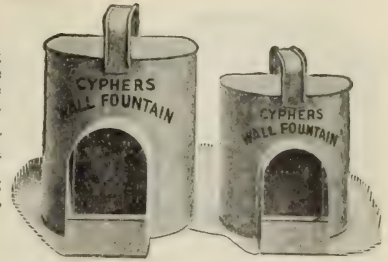
fowls. It is essential, therefore, that the drinking fountains used for poultry shall be not only suitable for holding water, but should also be easy to clean. This fountain is as easy to clean and air in the sun as any milk pan, and can be boiled in water or scalded without injury.

Small size, capacity 1 quart, each, 18¢; six, 90¢; 1 dozen, \$1.75.

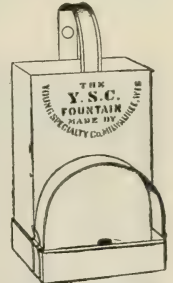
Medium size, capacity 2 quarts, each 25¢; six, \$1.25; 1 dozen, \$2.10.

Large size, capacity 3½ quarts, each 35¢; six, \$1.90; 1 dozen, \$3.50.

Special duck size, capacity 8 quarts, each 50¢; six, \$2.50; 1 dozen, \$4.50.

**THE Y. S. C. WALL FOUNTAIN.**

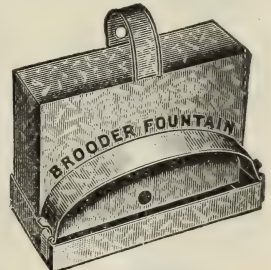
Made of heavy galvanized iron. Perfectly sanitary, can be taken apart and cleaned. Water pan is fastened with hinge and spring-clips. Only wall fountain that is perfectly sanitary. Made in 3 sizes: ½ gal., 45¢; 1 gal., 65¢; 2 gal., 90¢.



Y. S. C. Wall Fountain.

**KOSS' BROODER FOUNTAIN.**

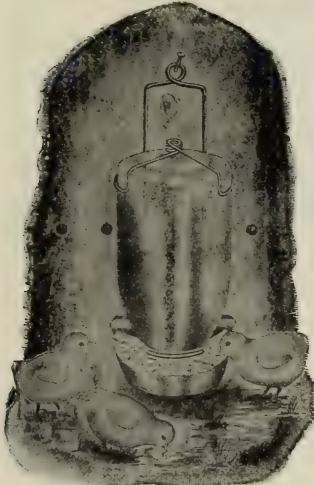
Made of heavy galvanized iron. Easily cleaned and filled. Water pan fastened with hinge and spring clip. Holds about one-half gallon. Length 8¼ in., extreme height 8 in. Price, 60¢ each.



Koss' Brooder Fountain.

**DAVIS FOOD AND WATER FOUNTAIN.**

This is the neatest fountain on the market and the only fountain which can be satisfactorily used for either water or grit, oyster shell, etc. Can be used with any size bottle or with pint, quart or two quart glass jars. It is easily cleaned and filled, is simple in construction, and we guarantee them to give satisfaction. Price, not including bottles or jars, 25 cents each; per dozen, \$2.75.



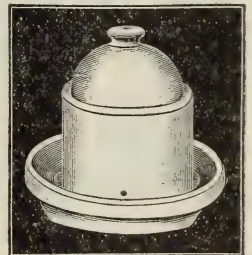
Davis Food or Water Fountain.

**SANITARY STONEWARE FOUNTAIN.**

Made in two parts. Easy to clean, being glazed on inside and outside.

Four sizes at the following prices:

	Weight.	Each.	½ doz.	1 doz.
1 qt. size .....	3 lbs.	\$0.20	\$1.10	\$2.00
½ gal. size .....	6 lbs.	.25	1.35	2.50
1 gal. size .....	8 lbs.	.35	1.80	3.50
2 gal. size .....	13 lbs.	.45	2.40	4.50



Sanitary Stoneware Fountain.

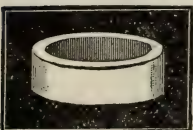
**W. R. STONEWARE FOUNTAINS.**

Unexcelled for poultry and pigeons. Filled with cold water in summer it remains cool all day; or in winter, if filled with warm water will retain the warmth a long time.

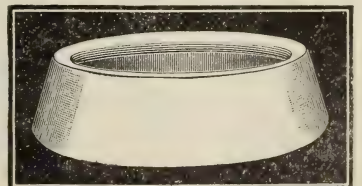
	Weight.	Each.	½ doz.	1 doz.
½ gal. size ....	4 lbs.	\$0.25	\$1.35	\$2.50
1 gal. size .....	8 lbs.	.35	1.80	3.50
2 gal. size .....	12 lbs.	.45	2.40	4.50

**STONEWARE RABBIT FEEDER.**

Size 7¼ inches in diameter, 2½ inches deep. Heavy glazed ware. Each 10¢; \$1.00 per dozen.



Stoneware Rabbit Feeder.



Stoneware Dog Feeder.

**STONEWARE DOG FEEDER.** Size 11 inches in diameter, 4 inches deep. Weight 7 lbs. each. Dogs cannot upset this feeder. Each 20¢; \$2.00 per dozen.

**STONEWARE CHICKEN NESTS.** Unglazed. 15 inches in diameter. Each 25¢, per doz. \$2.50.



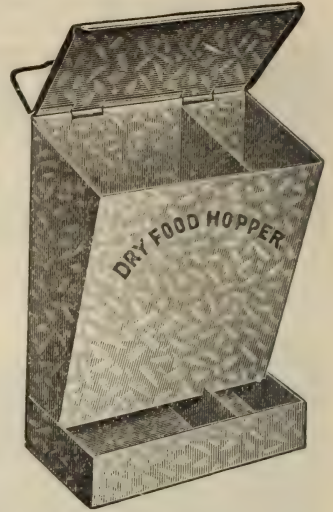
**KOSS' GRIT AND SHELL BOX.**

Koss' Sanitary Self-Feeding Grit and Shell Boxes work a material saving in grit, oyster shell, ground bone, charcoal or poultry foods. They are thoroughly practical, self-feeding boxes, well made out of heavy galvanized iron. This style of box is made with three compartments—for grit, oyster shells and charcoal. Like the dry food hopper, it is provided with a cover lid, which protects the contents, and being placed at an angle furnishes a slanting top, preventing fowls from roosting on the top of the box. Each 50c; per dozen \$5.00.

**KOSS' DRY FOOD HOPPER.**

Has two compartments, a large one for grain mixtures, holding about 6 quarts, and a small one for beef scraps, holding about 3 quarts. The trough of the hopper is big enough to prevent waste, and at the same time permit easy access to the food. The hopper is provided with a hinged cover, which protects the grain at all times from moisture and filth, and is also supplied with a strong handle for convenience in filling and handling. These hoppers are intended to be hung against the wall of a poultry house.

Price: Each 75c; per dozen \$8.25.

**BOSTON DRY FOOD HOPPERS.**

**Economical Device for Dry Feed, Beef Scraps, Etc.**

The Boston Hopper, all sizes, hangs against the wall or can be placed on the floor or ground. The swinging grid or metal guard prevents the fowls from wasting the food. The hopper can readily be "locked" at night (or in the daytime) by simply hooking the grid to the front section at the lower end—thus making the device rat-proof.

**PRICES OF BOSTON FOOD HOPPERS.**

**Large Dry Feed:** \$1.00. (Shown in illustration.) 17 in. high, 8 in. deep, 13 in. wide. Holds  $\frac{1}{2}$  bushel.

**Beef Scraps, Grit, etc.:** 90c. 17 in. high, 8 in. deep, 7 in. wide. Holds 1 peck.

**Short Chicken Size:** \$1.00. 15 in. long, 8 in. high, 4½ in. deep. Holds ½ peck.

**Long Chicken Size:** \$1.50. 29 in. long, 8 in. high, 4½ in. deep. Holds 1 peck.



Large Dry Food Size. Holds  $\frac{1}{2}$  bu. Price \$1.00. Shows adult fowl picking grain food through swinging grid (mesh) that rests on top of food at lower end and follows it as food is eaten. Shape of hopper is such that it can be hung against wall or set on floor and fowls can get all food placed therein.

**AMERICAN FEEDER.**

	Each	Six	Doz.
No. 1—18 in.....	\$ .50	2.75	5.10
No. 2—24 in.....	.75	4.00	7.65
No. 3—36 in.....	1.00	5.40	10.20

**POPULAR CHICK SERVERS.**

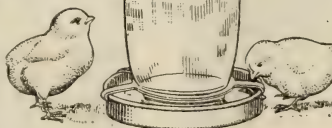
**For Supplying Food and Water to Small Chicks**

The type of Chick Server illustrated herewith is used extensively as a food and water dish for little chickens on range and confined in brooders, brooding houses, etc. Pictures show that this Server consists of two parts and is separable, making it convenient in use, easy to clean and therefore sanitary.

Prices of Chick Servers, one size only: 25c each; \$1.40 per half dozen; \$2.65 per dozen.

**AUTOMATIC FRUIT-JAR FEEDER AND FOUNTAIN.**

Feeds water, grain, grit, etc., automatically. It is easy to fill and operate. Just lift trigger, as shown in cut, which releases pan, clip remaining on jar, leaving pan without any obstruction, affording easy cleaning. Thus a sanitary fountain. Made to fit any ½ gallon, quart or pint Mason jar. We do not furnish the jars.

**TWO SIZES:**

No. 5—Having 5 inch pan, 15c each, \$1.50 per dozen.  
No. 6—Having 6 inch pan, 20c each, \$2.00 per dozen.

**MOIE'S TOP-FILL FOUNTAIN.**

Dead air space keeps water cool in summer and warm in winter. Just remove the top to fill—won't slop over. 1 gal. \$1.25; 2 gal. \$1.75; 4 gal. \$2.25.





Philo Cycle Hatcher.

Holds 50 Eggs. Constructed Entirely of Metal, Except Insulation. Is Self-Regulating. Requires No Supplied Moisture and Will Last a Lifetime. Shipping Weight, Well Boxed, Twenty Pounds.

## PHILO SYSTEM GOODS.

We carry a stock of Philo's Cycle Hatchers and Brooder Hatchers, illustrated herewith, and also Philo's Fireless Brooders. Ask for our special illustrated and descriptive circular of these goods. The following prices are F. O. B. Milwaukee:

One Cycle Hatcher, complete.....	\$ 6.50
Two Cycle Hatchers, complete.....	12.25
Four Cycle Hatchers, complete.....	23.25
One Brooder Hatcher, complete.....	8.50
Two Brooder Hatchers, complete.....	15.75
Four Brooder Hatchers, complete.....	29.25



Philo Brooder Hatcher.

Holds 50 Eggs. Compact, Safe and Practical Incubator and Brooder Combined, One Lamp Serving Both Purposes. Shipping Weight, Well Boxed, 25 Pounds.

## Prices of Circular, All-Metal Fireless Brooders:

Small size, 12 to 20 chicks.....	\$1.75	Large size, 30 to 50 chicks.....	2.75
Medium size, 20 to 30 chicks.....	2.25	Per set of three (one of each size).....	5.50

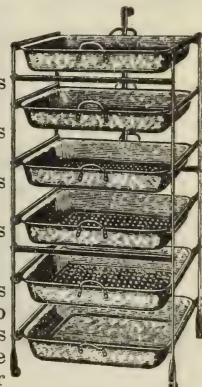
## REGAL OATS SPROUTER.

The value of this machine can only be appreciated after you have tested it out. No wood is used in its construction, to warp and to fall to pieces after a few days' use. Made from the best grade of galvanized steel. Double walled with heat flues running the full length inside. Every drop of moisture and drip goes direct into drip pan. This is one of our best special features. Another important point is the taking in of warm, fresh air not supplied by other makes. If directions are followed, there will be no molding or souring of grain.

	Price	For
Size No. 1—15x29, 3 trays and soaking tray.....	\$ 6.00	50 Fowls
Size No. 2—16x32, 4 trays and soaking tray.....	9.00	100 Fowls
Size No. 3—20x22x38, 5 trays and soaking tray..	12.00	300 Fowls
Size No. 4—24x24x46, 7 trays and soaking tray..	16.00	500 Fowls

## ECONOMY FIRELESS OATS SPROUTER.

Size of frame 18x18x35 in. Size of pans 16x17 in. Five sprouting pans and a pan to catch the drippings from above. The frame is made of iron, heavily japanned. The pans are galvanized and seamless. A good sprouter for the money. Price complete, only \$5.50.



Economy Sprouter.

## EGG DATERS.

If you want to work up a good private trade for strictly fresh eggs, it will pay you well to date each egg with our daters. Price of daters, 25c each. Ink Pads for same, 15c each.

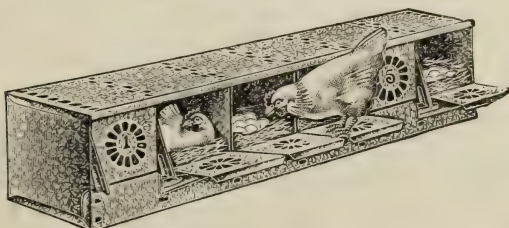
## WIRE NESTS.

These Nests are strongly made from heavy japanned steel wire and will last a lifetime. They are intended to fasten to the wall with screws or screw hooks. There is no room on them for lodgment of lice or vermin of any kind; they are easy to keep clean and are far superior to wooden boxes. Price: Each 15c; per dozen, \$1.50. Special prices for large quantities.



## ECONOMY FOUNTAIN OR FEEDER.

Can be used for either water or food, beef scraps, grit, oyster shells, etc. Any size Mason fruit jar can be fitted to the base. Seamless, galvanized, sanitary, economical. Price, without jar, 25c each, \$2.50 per dozen.



## KNUDSON'S GALVANIZED STEEL POULTRY NEST NO. 1.

Prices: \$3.50 per set of 6 nests; 3 sets for \$10.

Weight, crated flat for shipment, 30 lbs.



**NOTICE.**—The prices of feed quoted on this page are those current at time of going to press in January 1913. They are subject to change with the fluctuations of the market without notice. Write for special prices on large quantities.

#### CYPHERS CHICK FOOD.

**A Complete Food for Young Chicks:** Is a mixture of grains and seeds, proportioned so as to meet all the needs of growing chicks and to fully nourish them. By the term "fully nourished" we mean a great deal. Chick foods, as a rule, contain too much fat-forming and not enough bone-forming elements; and in consequence the chick develops indigestion and diarrhoea, which ultimately means no digestion at all, and quickly starves to death. If you feed Cyphers Chick Food, you are relieved of all concern, as the food is a complete and properly balanced food, ready for use. Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 80c, 50 lbs. \$1.40, 100 lbs. \$2.50.

#### CYPHERS DEVELOPING FOOD.

A special food intended for properly maturing young chicks after they are ready to be weaned from Chick Food. Contains a variety of grains in sizes and quantities exactly suited to the purpose. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.

#### CYPHERS GROWING MASH.

An easily assimilated food for hopper feeding. Promotes rapid growth of bone and muscle. It should be remembered that when the object is to induce the rapid growing birds to consume the maximum amount of food, a variety must be furnished. It was largely for this reason that Cyphers Growing Mash was placed on the market. We strongly recommend the use of this Growing Mash in connection with Cyphers Developing Food until the chicks are three months old, the Developing Food should be replaced by Scratching Food—both of these last named foods to be fed in deep litter. Cyphers Growing Mash is fed dry, just as it comes to you; therefore much labor is eliminated and the danger of sour food is entirely avoided. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. 1.25, 100 lbs. \$2.25.

#### CYPHERS FATTENING MASH.

Specially designed to promote rapid formation of flesh in the profitable production of broilers, roasters and capons. To be entitled to the highest market price the fowl must be "finished;" it should have a liberal supply of soft, tender meat on its frame, and this can be obtained only by the finishing or fattening process. There positively is no other finishing food on the American market that is worthy to be compared with Cyphers Fattening Mash. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.

#### CYPHERS FERTILE-EGG MASH.

A properly balanced bulky mash, the purpose of which is to secure the maximum number of fertile eggs. Every experienced poultryman realizes that in addition to proper care and management, intelligent feeding is necessary. To secure a large number of eggs is one thing—to have these eggs well fertilized and rich in chick-forming materials is a different matter. Cyphers Fertile-Egg Mash has for its special object the production of well-fertilized eggs in large numbers. It may be fed dry in hoppers, keeping a supply before the fowls at all times, or can be used as a wet mash, feeding it in this form once a day. Cyphers Scratching Food thrown in deep litter to keep the fows busy, should be used also. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.

#### CYPHERS LAYING MASH.

A balanced ration of ground grains and blood meal, ready mixed for hopper feeding. Promotes health and increases the egg yield. To secure a large yield of eggs the fowls must be given an ample amount of strongly nutritious food that contains, in proper proportions, all the materials needed for egg making. Cyphers Laying Mash is not in any sense a condiment or an egg stimulant. On the contrary, it is strictly a food—a palatable, highly nutritious, balanced egg ration, ready mixed for the daily mash, and is made to meet the demand of poultrymen, who as a result of unfavorable experience with cheap mash foods manufactured from by-products and inferior or damaged grain have learned the importance of using only such poultry foods as are produced from perfectly sound grains. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.

#### CYPHERS SCRATCHING FOOD.

An ideal dry grain mixture which affords variety, promotes exercise, insures health and vigor. A Scratching Food, rightly made up, is composed of such a variety of grains, properly balanced, as will meet a range of conditions extending throughout the year, including the laying and breeding season, the moulting period, etc. In selecting and preparing the grains and seeds for Cyphers Scratching Food they crack or cut them sufficiently small so that the fowls will have to work to find them and cannot eat the food all out of the litter in a few minutes. Price: 10 lbs. 30c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.

#### CYPHERS SHORT-CUT ALFALFA.

Guaranteed 95 per cent pure alfalfa. Alfalfa possesses from 14 to 17 per cent protein; Mangels 1.5 per cent; Grain 6.65 per cent. Protein is the most valuable and expensive element in all foods.

Alfalfa contains more protein than any other plant in general use as food, and if properly cured and pure it is cheaper. In other words, protein, the most valuable "content" of poultry foods, when bought in the shape of alfalfa, is low in price; but the alfalfa you use should be of good quality.

When used as the foundation of a moist mash, our Short-Cut Alfalfa is mixed dry with other foods and is then scalded or boiled with them, as the poultryman desires. When fed in connection with dry grains it should be scalded in a trough or other vessel and left for the fowls to eat at will.

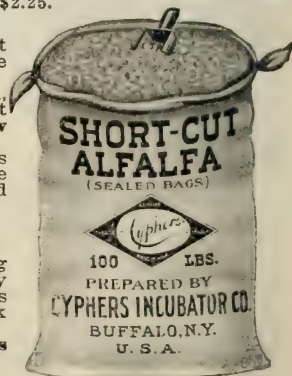
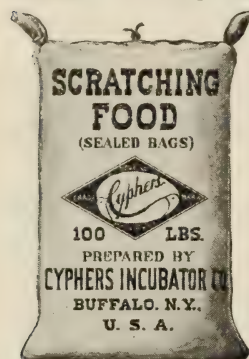
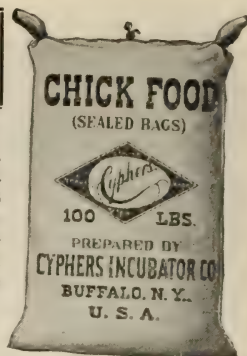
Price: 10 lbs. 30c, 25 lbs. 65c, 50 lbs. \$1.15, 100 lbs. \$2.00.

#### CYPHERS MEALED ALFALFA.

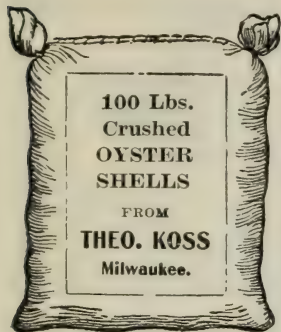
Guaranteed 95 per cent pure alfalfa. Specially suited to small and growing chicks. Mealed alfalfa should be used as the foundation of mashes for poultry of all ages, but it is especially valuable (in the mealed form) for young chicks on account of its finely pulverized condition. It aids digestion and affords bulk to grain foods which are often too concentrated.

If more alfalfa meal were fed to young chicks there would be far less mortality, and this applies equally well to mature fowls.

Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 70c, 50 lbs. \$1.25, 100 lbs. \$2.25.





**CRUSHED OYSTER SHELLS.**

We purchase these goods in car lots, hence can offer them at the lowest rock-bottom prices. Every pound of Oyster Shells offered by us is dried by a patent hot-air process and not by direct fire which burns out some of the most desirable qualities.

Our shells are crushed and ground to the size which expert poultrymen agree to be the best. If you have purchased other brands of Oyster Shells you have noticed that there are 10 to 25 lbs. of waste, consisting of dirt and dust, mixed in with every 100 lbs. of shell. **This means a loss to you.** Every pound of shell we sell is all shell and no waste.

It is needless for us to enlarge upon the value of Crushed Oyster Shells for poultry. Every poultryman realizes their importance as an egg-shell maker and general promoter of good health.

Prices: Grade No. 3. The right size for hens. 10 lbs. 10c, 25 lbs. 20c, 50 lbs. 35c, 100 lbs. 65c, 500 lbs. \$3.00. Grade No. 2. Ground finer than the No. 3, and intended for pigeons, young chicks and Bantams. 8 lbs. 10c, 25 lbs. 25c, 50 lbs. 45c, 100 lbs. 75c.

Special prices on larger quantities.

**MICO-SPAR CUBICAL GRIT.**

Mico-Spar Cubical Grit is a hard mineral product containing sodium, aluminum, magnesium, lime and iron, natural chemical properties which every poultry raiser knows are necessary to produce paying hens.

Paying hens lay their share of eggs regularly and willingly, never needing to be "forced" because they are well and strong. These are the slow but sure kind, the kind that helps raise the mortgage.

Mico-Spar Cubical Grit produces this kind of paying hens because it **makes and keeps** hens healthy. It creates perfect digestion because it keeps things in the crop on the move, owing to the fact that the corners of the cube always remain sharp. Honest, practical tests have shown that Mico-Spar Cubical Grit is the hen's choice, and that the minutest cube left in the crop retains its sharp corners.

Four sizes: No. 1 for Turkeys, Ducks, Geese and large Asiatics. No. 2 for poultry in general. Popular size, No. 3 for pigeons and chicks over three weeks old. No. 4 for baby chicks. Price: Any size, 8 lbs. 10c, 25 lbs. 25c, 50 lbs. 45c, 100 lbs. 75c, 500 lbs. \$3.25.

Special prices on larger quantities.

**HIGH PROTEIN BEEF SCRAP.**

We have no hesitancy in recommending High Protein Beef Scrap as the best of their kind on the market. These goods are ground at the Chicago Stock Yards especially for our trade. We guarantee their purity. No pork or fat is used to add weight. The ordinary commercial scrap contains but 35 to 45 per cent. protein and from 20 to 30 per cent. fat, while our scrap, as analyzed by the State Board of Agriculture, shows 50 to 65 per cent. protein and only 15 to 20 per cent fat. Fat in excess reduces the feeding values of poultry food, protein being the essential element. We, according, claim that 100 pounds of High Protein Beef Scrap has the feeding value of 200 pounds of any other scrap on the market. This scrap is now being used by the largest duck and poultry raisers in the country. A trial will convince you of the superiority of High Protein Beef Scrap. Do not compare the price you pay for High Protein Scrap with the price asked for other so-called scraps which, as a rule, are no less than refuse from soap factories or fertilizing works and have little or no value as a food. We mail you a sample package for the asking.

Price: 5 lbs. 25c, 10 lbs. 40c, 25 lbs. 85c, 50 lbs. \$1.65, 100 lbs. \$3.00. Special prices on larger quantities.

**BEEF MEAL.**

This is made from meat, bone, blood and the liquor from cooking. Rich in albumen and protein. It is a nitrogenous food and a great egg producer. Price: 100 lbs. \$2.50, 50 lbs. \$1.35, 25 lbs. 75c, 10 lbs. 35c, 5 lbs. 20c.

**GRANULATED BONE.**

The impression prevails in many quarters that bone must be fresh or green to be of value as a food. This is not the case. The fresh bone contains about 40 per cent. water and 12 per cent. grease; 52 per cent. of matter which your fowls do not need or care for and which also taxes the digestive organs unnecessarily. The granulated bone we offer is made from fresh, green bones, from which the moisture and grease have been taken, leaving nothing but the phosphate, lime and protein. These are the only food values of bone, green or dry, so when you buy dry bone you do not pay freight on moisture or grease. Granulated Bone will keep in any climate or kind of weather, if kept in a dry place. Bone is especially valuable as an egg-shell producer. Sample package mailed on application. Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 75c, 50 lbs. \$1.35, 100 lbs. \$2.50. Special prices on larger quantities.

**FINE GROUND RAW BONE MEAL.**

Raw Bone Meal is also made from fresh bones and is of the same stock as the Granulated Bone, but is reduced through a finer sieve. It is ground fine and is especially useful to mix with mash food. Cyphers Laying Food is a complete ration and it will not be necessary to use Ground Bone Meal if this food is fed, but with any of the other poultry foods offered we recommend the use of Raw Bone Meal. A sample package mailed on application. Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 75c, 50 lbs. \$1.35, 100 lbs. \$2.50. Special prices on larger quantities.



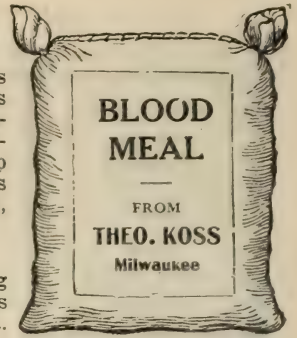
**BLOOD MEAL.****Unexcelled as an Egg Producer.**

Pure Blood Meal fed poultry will make your hens lay, your chicks grow fast and keep your fowls healthy. The Blood Meal offered by us is guaranteed to be pure and free from adulteration, also free from objectionable odor which generally accompanies other poultry foods containing animal matter. Our Pure Blood Meal contains no ground bone or other cheap adulteration of any kind. It has less than 5 per cent. of moisture, and is the most complete poultry egg food in use. Price: 5 lbs. 30c, 10 lbs. 50c, 25 lbs. \$1.10, 50 lbs. \$2.00, 100 lbs. \$3.75.

**CHARCOAL.**

No poultryman can afford to be without charcoal. A little goes a long way, and it is worth its weight in gold to raisers of young chickens. It aids digestion and promotes the health of brooder chicks to a wonderful extent. The use of charcoal is generally corrective of numerous poultry ills.

As charcoal absorbs 90 per cent. of its own weight of amomina (a deadly poison to young chickens) it is necessary that charcoal for poultry should be specially prepared—ordinary commercial charcoal should not be used. Our charcoal is guaranteed pure, and free from dangerous poisons. Sold in three sizes: Coarse granulated for general use, fine granulated for chicks and half-grown chicks, pulverized for use in mash mixtures and for ducks. Be sure to specify the size you want. Prices: 1 lb. 5c, 5 lbs. 20c, 10 lbs. 30c, 25 lbs. 65c, 100 lbs. \$2.25.

**HEN-E-TA.**

All grains (and meats) are sadly deficient in phosphorus, and this circumstance accounts for the fact that out of every 100 lbs. protein fed, only about 60 lbs. are utilized (assimilated or absorbed), while about 40 lbs. are voided in the manure. This is a source of enormous money loss.

**"HEN-E-TA" Will Stop This Loss.**

Hen-E-Ta is a highly Phosphoric Mineral deposit that has been baked in a temperature of 3,000° Fahrenheit, which renders it very gritty yet porous.

**Made in Four Grades.**

No. 1, fine for young chicks; No. 2, medium for laying hens; No. 3, coarse for large fowls and turkeys; No. 4, superfine for mashes.

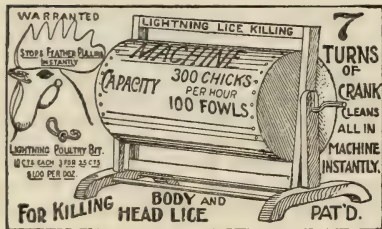
Price: 5 lbs. 20c, 10 lbs. 35c, 25 lbs. 75c, 50 lbs. \$1.35, 100 lbs. \$2.25.

**LIGHTNING LICE KILLING MACHINE.**

Put chickens in the cylinder, turn it slowly and they will stir up the powder so as to completely cover themselves with it. Price, each, \$3.00.

**LIGHTNING POULTRY BITS.**

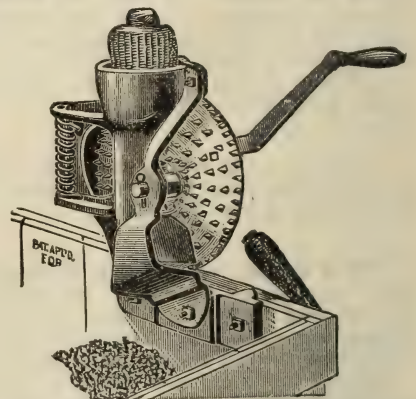
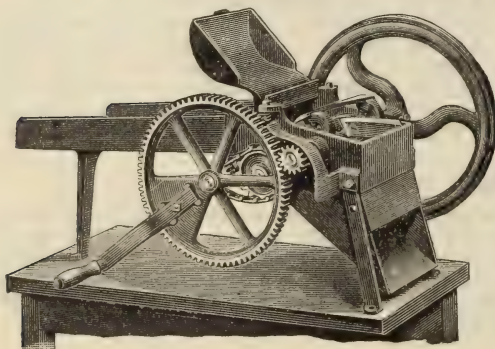
Stops feather pulling instantly. Each 10c; \$1.00 per dozen.

**FAMOUS CORN SHELLER.**

Simple, strong, convenient, cheap. Weight 15 pounds. Capacity, 8 to 10 bushels per hour. A sheller that is portable and can be used in winter evenings near the kitchen fire, or to shell corn for poultry, pop corn, seed corn and other purposes. Is in demand even by those who own a large-sized sheller. Price, each, \$1.00.

**"NEW MODEL" CLOVER CUTTER.**

Removable Steel Knives—Adjustable Cutter Bar—Runs Easy—Cuts Fine. Is Durable.



The feature that gives the "New Model" easy supremacy over similar machines is the cutting mechanism. The machine can be kept in perfect cutting order at all times, because the cutter bar is adjustable and easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Those who are familiar with "ordinary" Clover Cutter construction will appreciate these improvements.

The "New Model" is made only of iron and steel, from entirely new patterns. Length over all, 28½ inches.

Weight, 60 lbs. Price, \$10.00.



**MANN'S GREEN BONE CUTTERS.**

**Warranted Against Breakage. Guaranteed to Give Satisfaction.  
Simplest in Construction. Never Get out of Order.**

New design, enlarged table, new device to control feed; you can set it to suit any strength; never clogs.

A Standard Machine, easy and rapid cutting, feeds automatically and leaves both hands free to operate.

The Mann's Bone Cutter cuts more rapidly than any other; its knives are in action all the time. The Mann's has a perfectly self-governing automatic feed. You do not have to use one hand for controlling the feed—a tiresome, tedious, awkward process. You do not have to take the machine apart to clean the plates or adjust the knives. You drop the bone into the open cylinder. There is no packing, no fastening, no bother, no arranging. You simply toss in the bone on one side or both sides of the partition, as you like, drop the follower in place, clasp on the feed handle, and you are ready for business, with both hands free to relieve each other in turning, if you so desire. The feed is both automatic and self-governing, a feature not successfully accomplished by any other bone cutter.

**REMEMBER.**—Green bones are tough and no matter how perfect the machine is, you want them large enough to cut for your flock easily.

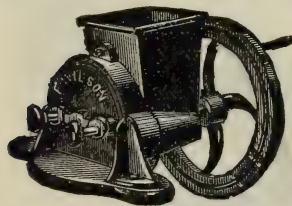
**Don't Get Too Small a Size.**

**PRICE LIST.**

No. 5C	—With Crank Handle	\$ 6.00	
No. 5B	—With Balance Wheel	8.00	
No. 5BM	—With Balance Wheel and Iron Stand	10.40	No. 5B, Weight 55 lbs.
No. 7	—With Balance Wheel	12.00	
No. 7½	—Combination Hand or Power Cutter	16.00	
No. 9	—Standard Bone Cutter	18.40	
No. 11	—Combination Power Cutter	26.00	

**DRY BONE AND SHELL MILL.**

This is one of the handiest appliances in use. It is the best thing for grinding dry bone, oyster or clam shells, coarse grains like corn, charcoal, etc. It is a well-made mill, and thousands of them are in successful use. We have never yet received a complaint from anyone to whom this mill has been sold. The low price at which it is sold places it within the reach of every poultryman, and it will pay for itself in less than one year's time. Diameter of hand wheel, 20 inches. \$4.50 each.



Dry-Bone and Shell Mill

**BANNER ROOT CUTTER NO. 7.**

Next to the Green Bone and Clover Cutter as a factor to winter egg production comes a Vegetable and Root Cutter. In winter when all vegetables are frozen up, some substitute for the tender blade of grass and other green food which poultry finds during the summer is necessary to get best results.

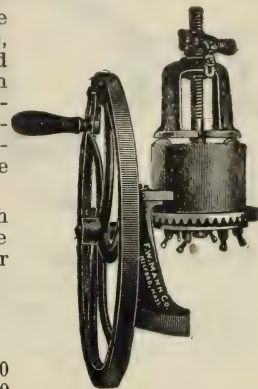
Cut clover helps out to some extent,

but some more succulent food is greatly relished by the birds and does much to keep them in a healthy laying condition. Sugar beets fill the bill. Carrots, potatoes, cabbage, onions, etc., are also very good. The Banner will cut all these vegetables into the best of shape so that fowls eat it down as they would worms. It has an iron grate in hopper next to knives so that all dirt will rattle through. Hopper can be removed readily by removing 2 screws so that knives are easily accessible if in need of sharpening. Weight, 35 lbs. Price, \$5.00.

**BANNER ROOT CUTTER NO. 24 B.**

The No. 24 B is for people who keep a small flock of fowls and want to feed roots and not buy the larger machines. Adjustable. Cuts fine or coarse. 7x18 inches. Price, \$1.00.

The patent Banner Knife is used, so the cut feed coming from these root cutters is alike and can be fed to all poultry large and small,



No. 5B, Weight 55 lbs.









## LEG BANDS.

## Climax Leg Bands—The "Stay On" Kind.

They are in general use by leading poultrymen and poultry associations, and their immense sale attests their popularity. Rings are made of spring brass and the tags are of aluminum.

Sizes: No. 1,  $\frac{1}{2}$  in.; No. 2,  $\frac{5}{8}$  in.; No. 3,  $\frac{3}{4}$  in.; No. 4,  $\frac{7}{8}$  in.; No. 5, 1 in.; No. 6,  $1\frac{1}{8}$  in. Always give sizes wanted, or state breed of fowls bands are to be used on. They are not made in pigeon sizes.

Prices, postpaid: Per doz. 15c; per 25, 30c; per 50, 45c; per 100, 75c; 500 for \$3.25.

Sizes used for different breeds: No. 1, Bantams and Small Mediterranean Females. No. 2, Mediterranean Females. No. 3, Mediterranean Males and American Females. No. 4, Large American Females, Small American Males and Small Asiatic Females. No. 5, American Males, Asiatic Females, Small Asiatic Males. No. 6, Asiatic Males and Turkeys.

## THE "PERFECTION" LEG BAND. EXACT SIZE.

## PERFECTION LEG BANDS.

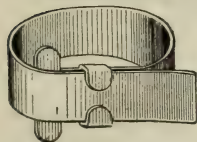
The latest and best thing in leg bands. It has no punch holes or slots to weaken it. Simply a strip of aluminum with four ears at one end, and when folded forms a double lock that is positive in grip. It is adjustable and will fit anything from a bantam to a mammoth turkey. Prices: 1 doz. 15c, 25 for 25c, 50 for 40c, 100 for 65c, 500 for \$2.75, postpaid.



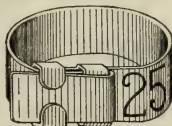
First Fold.

Second Fold.

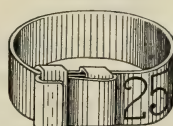
Third Fold.



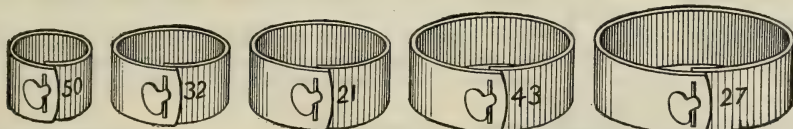
THE THREE FOLDS



SEE THE DOUBLE LOCK



## THE ECLIPSE LEG BAND.



No. 1, for Bantams and small Mediterranean females. No. 2, for Mediterranean females. No. 3, for American females. No. 4, for American males, Asiatic females, small turkeys. No. 5, for Asiatic males and turkeys. Prices: 15c per 12; 25c per 25; 40c per 50; 65c per 100.

## THE SMITH SEALED LEG BANDS.



The Smith Sealed Leg Band makes positive identification of the banded bird possible.

When sealed on, and the band number and description duly entered on score card, or award card, any child that can read can pick out the bird from card and band. Smith's Sealed Leg Bands never come off when once fastened on and never can be taken off without destroying the band.

These bands are numbered in lettered series of A1 to A10000, B1 to B10000, etc. No duplicate numbers are ever made.

No. 1, Bantams and small Mediterranean females, etc. No. 2, ordinary Mediterranean and Pit Game females, etc. No. 3, Mediterranean males, American females, American males, medium Asiatic females, turkey hens, etc. No. 5, ordinary large Asiatics and Tom Turks, etc. No. 6, extra large Asiatics and very large Tom Turks, etc.

Prices: 12, 30c; 25, 50c; 60, \$1.00; 100 \$1.50; 250, \$3.50; 500, \$6.50; 1,000, \$12.50.

Sealers for Smith Bands: Plain, 50c; Lettered jaw, 65c; Nickel-plated lettered jaw, 75c.

## THE IMPROVED CHAMPION LEG BAND.



Made of aluminum, adjustable to fit any fowl, large or small. Impossible for them to come off, being held by double lock.

Price: Per dozen, 15c; per 25, 25c; per 50, 40c; per 100, 65c; 500 for \$2.75. Postpaid.

## LEADER ADJUSTABLE LEG BANDS.



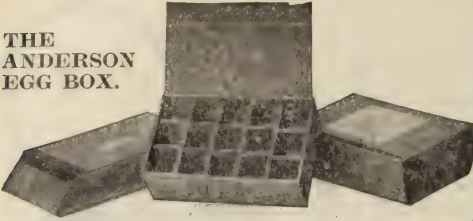
Easily attached, absolutely secure and have no catching points. Made from heavy aluminum, strong and substantial. Prices: 1 doz. 15c, 25 for 25c, 50 for 40c, 100 for 65c, 500 for \$2.75. Postpaid.

## THE PERFECT BELGIAN HARE EAR MARKER.

These ear markers are made of aluminum, and are numbered from one to one hundred. They are light in weight, durable, and never tarnish or corrode. Price of tags, postpaid, are as follows: 12 tags 15c; 25 tags, 25c; 50 tags, 40c; 100 tags, 70c.



**THE  
ANDERSON  
EGG BOX.**



**ANDERSON EGG BOX.**

This box makes an admirable package for shipping fancy eggs. It folds flat for shipment. When set up it becomes strong and durable. The eggs are surrounded by a double thickness of corrugated paper, which perfectly protects them from any injury.

The box is sealed by means of gummed labels, which are furnished free. The label answers both for address and seal.

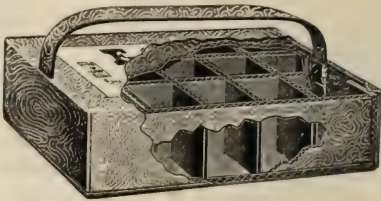
**Prices.**

No. 3. One setting, each	.....\$0.15	Per dozen.....	\$1.15
No. 4. Two settings.....	.20	Per dozen.....	1.90
No. 5. Fifty-egg size.....	.25	Per dozen.....	2.75
No. 6. One hundred-egg size, each	......40	Per dozen.....	4.50
Weight per dozen: No. 3, 10 lbs.; No. 4, 13 lbs.; No. 5, 24 lbs.; No. 6, 45 lbs.			
These boxes come packed in dozen lots.			

**EYRIE EGG SHIPPING BOX.**

Unquestionably the best device yet found for shipping safely fancy eggs by express. Made of heavy corrugated cardboard; are very strong, compact, light and convenient. The handle, when put in place, locks the box, and it cannot be tampered with in transit.

Price: 1 sitting, each, 15c; per dozen.....	\$1.35
2 sitting, each, 20c; per dozen.....	2.00



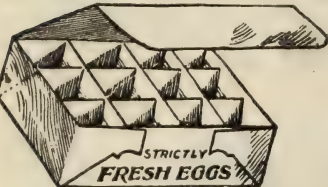
**IDEAL PAPER EGG BOXES.**

**Just the Thing for Your Family Egg Trade.**

These boxes are intended for use in delivering eggs to private families. They are exceedingly neat in appearance, and go a great way toward making satisfied customers. They ship "knocked down," can easily be set up and can be sent by express or freight at very low rates. The customer, after using contents, can take them apart and return them.

Prices: 1 dozen size, 1 dozen 15c, 25 for 30c, 50 for 50c, 100 for 90c. Ask for special prices on larger quantities.

90c. Ask for special prices on larger quantities. made up better and stronger than the above: 1 dozen 20c, 25 for 35c, 50 for 65c, 100 for \$1.20.

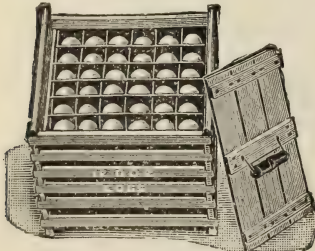
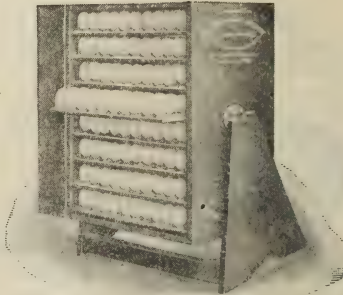


**WOOD'S REVOLVING EGG CABINETS.**

Eggs intended for hatching should be turned daily; the warmer the temperature the more necessary that they be turned. Eggs for market should be turned every two or three days if kept any length of time. Wood's Revolving Egg Cabinets are a practical device for doing this work, and meet a widespread need among poultrymen who save eggs for hatching. Eggs for table use (not fertilized) have been kept from three to four months in an ordinary cellar by using these cabinets.

**Prices of Wood's Revolving Egg Cabinets:**

150-egg size, weight 30 lbs.....	\$3.50
288-egg size, weight 55 lbs.....	5.50
560-egg size, weight 75 lbs.....	7.25
1050-egg size, weight 100 lbs.....	11.00



**HUMPTY DUMPTY FOLDING EGG CRATE.**

A very light, strong and convenient Egg Crate and Carrier. Made of hard wood slats securely fastened. The lid with handle springs into position when crate is filled. Folds perfectly flat when empty.

**Prices.**

6 dozen size.....each, 25c;	per dozen, \$2.75
9 dozen size.....each, 30c;	per dozen, 3.25
12 dozen size.....each, 35c;	per dozen, 3.75
30 dozen size.....each, 75c;	per dozen, 7.50

**SEFTON LIVE CHICK BOXES.**

Made of the same grade of corrugated paper as the Eyrie Egg Boxes. Dead air cells in the paper protects the tender chicks. Each box is divided into compartments that will hold about 25 chicks. There is money in shipping live chicks. Get a supply of our Live Chick Boxes, start your incubator and keep it running.

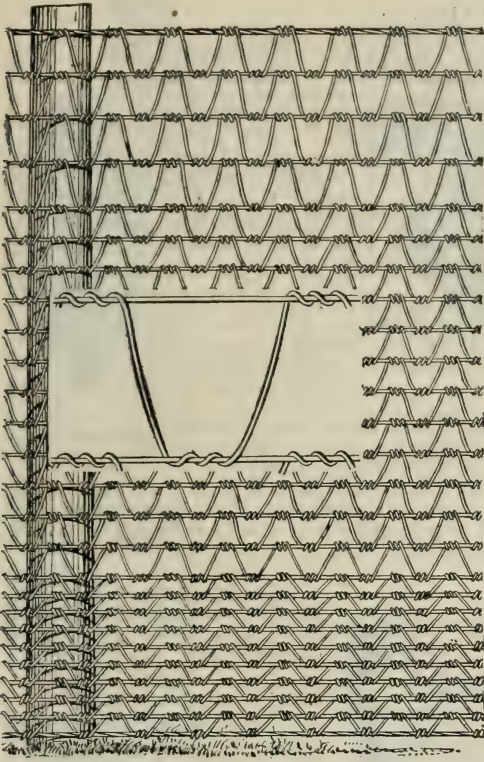
**Prices:**

25 Chicks, size 12x 6x5, weight per doz. 6 1/2 lbs., per doz.	\$1.25
50 Chicks, size 12x12x5, weight per doz. 14 lbs., per doz...	1.75
100 Chicks, size 24x12x5, weight per doz. 22 lbs., per doz...	2.90



Sefton Live Chick Box



**CLIMAX POULTRY FENCE.**

This fencing, with its graduated meshes, is, as the illustration shows, a perfect barrier for all kinds of poultry. Neither the small chick nor the full grown fowl can pass through the meshes.

Climax Poultry Fence is easily erected. It has a heavy cable selvage at the top and at the bottom, which give great strength, making unnecessary a top rail and a bottom board, at the same time permitting wider spacing between posts. This means a saving of posts and a saving in labor, consequently a saving in expense for erection. Another feature about Climax Poultry Fence is the horizontal wires, which permit a uniform stretching.

Climax Selvages are made of two strands of No. 18 wire. The large meshes in Climax Poultry Fence are also No. 18 wire, while the medium size meshes are No. 19 wire, and the small meshes are No. 20 wire. The spacing of the meshes, beginning at the bottom, is as follows. Nine meshes  $1\frac{1}{2}$  in. Twelve meshes  $2\frac{1}{4}$  in. All the other meshes  $3\frac{1}{2}$  in.

Climax Poultry Fence is put up in bales, 10 rods to the bale, and measure full width. Galvanized after woven and very durable. It will outwear other brands made of several gauges heavier wire.

Prices per bale: 36 in. wide, \$3.50; 48 in. wide, \$4.00; 60 in. wide, \$4.75; 72 in. wide, \$5.50.

5 per cent. discount in 5 bale lots, or over.

Prices F. O. B. Milwaukee.

**HEXAGON POULTRY NETTING.**

More of this netting is used for poultry yards than any other make. It gives first-class satisfaction, rolls out smooth and is practically indestructible. After the fabric is woven it is given a heavy coating of zinc, which prevents rust, and this in combination with great tensile strength, makes it the best poultry netting on the market.

Each roll 150 feet long. The two-inch wire. The one inch mesh, which is used for little chicks, we furnish in No. 20 wire. Either mesh furnished in the following widths and weights:

**2 in. Mesh, No. 19 Wire.**

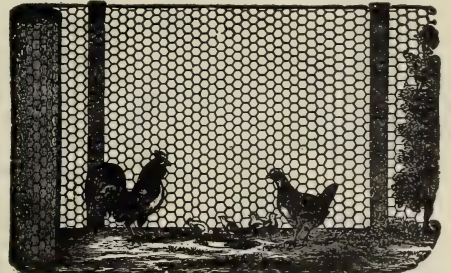
Width of Netting	Weight Per Roll (About)	Price Per Roll
12 inches	10 lbs....	\$0.90
18 inches	15 lbs....	1.35
24 inches	21 lbs....	1.80
30 inches	25 lbs....	2.25
36 inches	31 lbs....	2.70
42 inches	36 lbs....	3.15
48 inches	40 lbs....	3.60
60 inches	50 lbs....	4.50
72 inches	59 lbs....	5.40

**1 in. Mesh, No. 20 Wire.**

Width of Netting	Weight Per Roll (About)	Price Per Roll
12 inches	19 lbs....	\$1.90
18 inches	29 lbs....	2.85
24 inches	38 lbs....	3.75
30 inches	48 lbs....	4.70
36 inches	57 lbs....	5.60

5 per cent discount in 5 roll lots, or more.

Price f. o. b. Milwaukee.



Less than a roll of 1 inch mesh netting,  $1\frac{1}{2}$ c per sq. ft. Less than a roll of 2 inch mesh netting,  $\frac{3}{4}$ c per sq. ft.

Heavy Galvanized Steel Wire Staples, 10c per pound, 5 lbs. 45c.

**"NEPONSET" ROOFING AND LINING PAPERS.**

Water tight, air tight, frost tight, vermin proof—actually and fully.

"Neponset" is made in two styles, each adapted to certain uses. One is the "Neponset" Red Rope, which is used for roofing, siding, covering and carpeting. The other is "Neponset" Black Sheathing, and is used for lining and insulating and where the Red Rope proves too expensive.

"Neponset" is not a coated paper, but the same all through. It is water tight; this fits it for roofing. It is impervious to air; this fits it for siding. It is a high non-conductor; this fits it to take the place of back plaster as a defense from the sun in summer and the cold in winter, and also makes it valuable for all insulating purposes.

"Neponset" Red Rope Paper, rolls 36 inches wide, per roll of 100 square feet .....net, \$1.35

"Neponset" Red Rope Paper, rolls 36 inches wide, per roll of 250 square feet .....net, 2.75

"Neponset" Red Rope Paper, rolls 36 inches wide, per roll of 500 square feet .....net, 5.00

Black "Neponset" Water Proof Building Paper, rolls 36 inches wide.

Per roll of 500 square feet.....net, \$2.40





## LEE'S POULTRY SUPPLIES.

**Lee's Egg Maker.**—The perfect substitute for all other forms of meat food. Contains more digestible protein, costs less, and goes further than beef scraps, bone, or any other meat food. Used by big breeders everywhere. Equally valuable as a winter food for hens, for all penned-up poultry, and as a growing food for chicks. 25 lb. pail, \$2.00; 15 lb. pail, \$1.25; 2½ lb. pkge., 25c.

**FOR CHICKENS AND HOGS**



Kills both by vapor and contact all vermin whether on the walls of the poultry house or on the body of the fowls. Also a powerful disinfectant. Disease germs can not live where Lee's Lice Killer is used regularly. Quart, 35c; ½ gal., 60c; gal., \$1.00.

**Lee's Insect Powder** is thoroughly efficient for any purpose for which an insect powder is desired. Especially recommended for use on setting hens, or by those who have only a few fowls and prefer to treat them in this way. Also good for pet animals. Prepared in 1¼-lb. sifter-top box. Each 25c.

**JUMBO POWDER GUN.**

This Insect Powder Gun has been made to meet a demand for as large a gun as can be held in the hand. The bottom, or spout part, as will be seen, screws on or off, and makes a large opening for filling with powder. Just the thing for applying Cyphers Lice Powder. Price, each 25c, postpaid 30c.

**OVINAPHTHOL NEST EGGS.**

Our Ovinaphthol Lice Killing Nest Egg is the standard combined nest egg and lice killer. By simply using it in the nests in the same manner as any ordinary nest egg is used, laying hens are ridded of lice and mites and are able to occupy the nests with comfort. The use of this nest egg insures absolute freedom from all kinds of insect pests in the nest. They are always at work, safe to use and certain in results. Being prepared with great care for this special purpose they will last a long time and always retain their effectiveness.

This makes them the most inexpensive medicated nest egg that can be used. They are standard size eggs, tinted a natural brown color.

Prices of Ovinaphthol Nest Eggs, each, 10c; 3 for 25c; per dozen, 75c.

**LICE KILLING NEST EGG.**

Our Lice Killing Nest Eggs are almost an exact imitation of the real hen egg, and yet contains a powerful disinfectant, which is guaranteed to expel lice and vermin.

Much of the disease among poultry is caused by lice. Save your money and chickens by using our Lice Killing Nest Egg. They will do it. Try them.

Hens are profitable because of the eggs they produce. But hens will not lay when covered with lice. You can get rid of lice by using Lice Killing Nest Eggs.

Prices: 2 for 15c; ½ doz. 35c; 1 doz. 60c.

**PORCELAIN NEST EGGS.**

These eggs are made of first-class flint glass, they do not break easily and will last a life-time. Prices, two, 5c; per dozen, 25c.



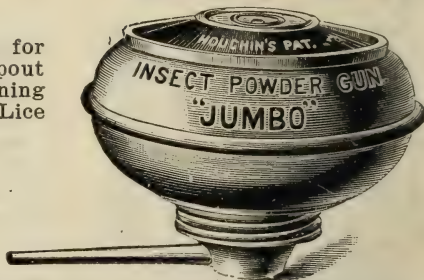
**Lee's Germozone.** A tonic; a bowel regulator; a system builder. The best preventive and cure for Roup, Cholera, Bowel Complaint and most other poultry diseases. Given twice a week in the drinking water to all fowls, it keeps them in prime condition. One size only, 50c

**Lee's White Diarrhoea Remedy.**

We believe it is the best cure and preventive of White Diarrhoea ever discovered, and don't know of a single instance where it has not proved satisfactory. The dose required is small, treatment simple, and cost insignificant. One size only, 50c.

**Lee's Head Lice Ointment.**

Nothing is more annoying than head lice on chicks; nothing will more quickly sap the chicks' vitality. Chicks raised by the "hen" method are especially bothered in this way. Lee's Head Lice Ointment is thoroughly effective, inexpensive, and easy to apply. In large two-ounce boxes. Each, 15c.



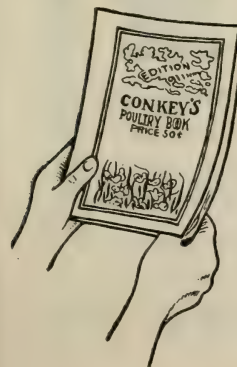
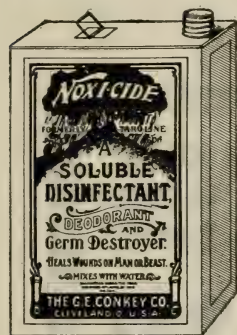
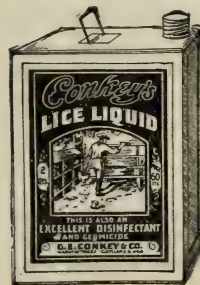
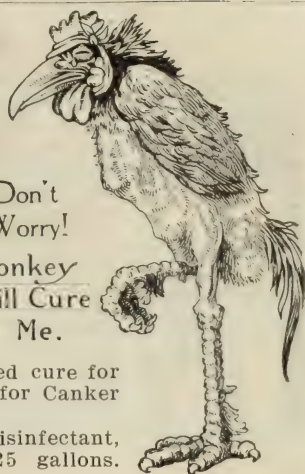




# CONKEY'S POULTRY REMEDIES



Don't  
Worry!  
Conkey  
Will Cure  
Me.



**Conkey's Roup Remedy.** A positive and guaranteed cure for all forms of this disease. Effective for Turkeys, and for Canker in Pigeons. Price, 50c and \$1.00, postpaid.

**Conkey's Noxicide.** A non-poisonous soluble disinfectant, deodorant and germ destroyer. One quart makes 25 gallons. 1 pt. can 35c; 1 qt. can 60c.

**Conkey's Laying Tonic.** Will positively increase the egg production. Price, 1½ lb. package, 25c; 3½ lb. package, 50c.

**Conkey's Lice Liquid.** Carefully prepared and guaranteed to please. Price, quarts 35c; ½ gallons 60c.

**Conkey's Head Lice Ointment.** Instant death to these pests. Price, 1 oz. tin 10c; 3 oz. tin, enough for 300 applications, 25c, postpaid.

**Conkey's Gape Remedy.** Gradually overcomes the worm. Price, 50c per box.

**Conkey's Chicken Pox Remedy.** A combination salve and powder that is guaranteed to give satisfaction. Price, 50c.

**Conkey's Lice Powder.** Claimed to be the strongest and most effective powder in the market. 15 oz. box 25c.

**Conkey's Healing Salve.** Valuable in treating Pavus, Wounds, Sores, Cuts, Bruises, etc. Price, 25c, postpaid.

**Conkey's Cholera Remedy.** A positive cure for Bowel Trouble, Indigestion, Diarrhoea, Dysentery, Cholera, etc., in both old and young fowls. Price, 50c per box, makes 50 gallons of medicine.

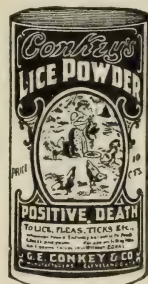
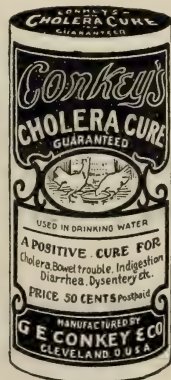
**Conkey's Scaly Leg Remedy.** A combination wash and ointment. This disease is contagious and injurious to fowls. Price, 25c.

**Conkey's Poultry Tonic.** A remedy especially valuable for fowls run down, off feed, recovering from disease and during the moulting season. Also for chicks that do not thrive. Price, 25c.

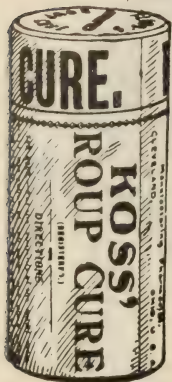
**Conkey's White Diarrhoea Remedy.** Don't despair. Save the little chicks. Get a package of this remedy to have on hand. Price, 50c.

**Conkey's Poultry Laxative.** A reliable laxative is often needed by itself, or in connection with another remedy. It is compounded especially for poultry and a great help to every poultry breeder. Price, 25c.

**FREE—Here's Something for You** if you are interested in chickens. This fine, new, big edition of **Conkey's Poultry Book** we give free to interested customers, or will send by mail on receipt of stamps, 4 cts. Treats the whole poultry subject, housing, breeding, feeding, incubation, as well as care and management of fowls when diseased. Includes Turkeys, Ducks and Geese. You want this book. You can make a success of poultry if you follow this book. Come in or send 4 cts. in stamps for your copy.

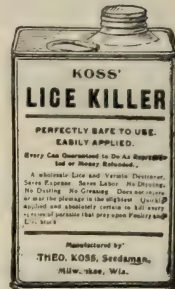




**KOSS' ROUP CURE — CURES ROUP.**

Koss' Roup Cure is the best possible remedy for roup in all stages and forms. It is thoroughly reliable and dependable. Roup is the most common, and next to cholera, the most deadly disease affecting poultry. Every poultryman should take precautions to safeguard his chicks against this dreaded disease. Roup is a contagious catarrhal disease caused by a specific germ. It may attack any flock, and usually follows neglected, simple colds. The symptoms are first, frothing and bubbles in the corners of the eyes, then they are sneezing, snuffles and a watery discharge from the nostrils and eyes. This discharge always has a foul odor—the "roup smell." Whenever the "roup smell" is present there roup exists. The bird's head may swell, the eyes bulge out, and cheesy masses may form in the mouth and throat and beneath the eye lids; this condition is known as diphtheritic roup. Koss' Roup Cure is used by simply dissolving the remedy in the drinking water. The birds take their own medicine.

Price 50c per box, postpaid.

**KOSS' LICE KILLER (LIQUID).**

Don't feed lice if you are raising poultry. It is not only unsatisfactory, but unprofitable. Get rid of the lice, mites, and all other pests by using Koss' Lice Killer. This is the strongest liquid lice killer on the market. Koss' Lice Killer is made under our supervision, so we can guarantee its purity and strength.

It can also be used for stock. Examine your poultry and stock carefully. If you find any signs of lice or other vermin, by all means, use Koss' Lice Killer. You cannot afford to raise lice, poultry and stock at the same time.

Directions:—Koss' Lice Killer does not have to touch the lice and mites in order to kill them. It evaporates, and the gases formed do the work. This is the up-to-date method, and is far ahead of the old way of dipping and greasing. For stock, sprinkle on the bedding and on the rubbing posts.

Prices: 1 qt. can, 35c; 2 qt. can, 60c; 1 gallon can, \$1.00.

**KOSS' INSECT POWDER.**

Removes that itchy feeling. If you prefer the powder form of Lice Killer, use Koss' Insect Powder. Put in the nests and sprinkle in the bird's feathers. Just the thing to kill lice on young chicks and setting hens. Also kills insects on plants, exterminates chiggers, moths, ants, roaches, fleas, etc.

Prices: 5 oz. box, 10c, by mail, 15c; 16 oz. box, 25c, by mail, 40c; 48 oz. box, 50c, by mail, \$1.00.

**KOSS' CONDITION POWDER AND EGG PRODUCER.**

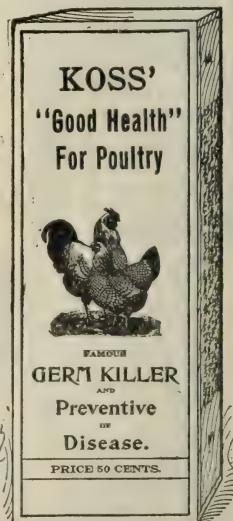
Contains only egg forming food. Composed of pure materials of highest quality, scientifically compounded, thoroughly balanced and perfectly pure and free from harmful substance. Keeps the fowls in the pink of condition and enables them to bear up under the egg forming process. Full directions in each package.

Price: 2½ lb. pkge., 25c; 5 pkges, \$1.15.

**KOSS' "GOOD HEALTH" FOR POULTRY.**

A reliable antidote for many diseases of poultry. Disease cure and preventive. Used at the strength of one teaspoonful to each gallon of drinking water, the remedy will cure Roup, Cholera, Indigestion, Bowel Complaints, etc. All vessels should be kept perfectly clean and occasionally scoured.

Price per bottle, 50c.





## Cyphers New PORTABLE HOVER.

FOR HANDY AND ECONOMICAL BROODING OF CHICKS AND DUCKLINGS. IS SELF-REGULATING, SELF-VENTILATING, ALL-METAL AND INDESTRUCTIBLE.

The self-regulating and self-ventilating Portable Hover illustrated herewith was invented by the Cyphers Incubator Company in 1910 and has been well tested by them during two seasons of practical use on their poultry farm. It is guaranteed to be the best device of the kind on the market.

**SELF-REGULATING.** The Cyphers New Portable Hover is self-regulating, as far as a brooder device can be made so. The same high-grade, dependable, toggle-joint, zinc and steel thermostat that is used on the Standard Cyphers Brooders is also put on this new Portable Hover.

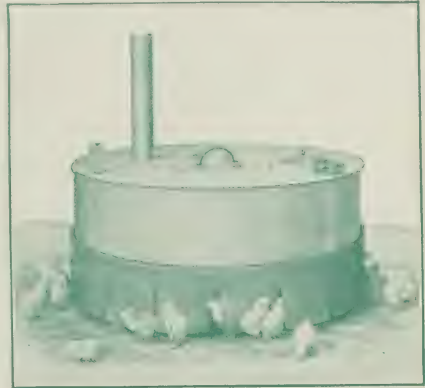
**SELF-VENTILATING.** This latest-improved Portable Hover is positively and infallibly automatic in ventilation—a patented feature.

**CAPACITY.** It will hover comfortably one hundred newly hatched chicks, but we advise strongly against trying to brood chicks in flocks greater than fifty to seventy-five.

**PORTABLE MEANS MOVABLE.** As its name indicates, the new Cyphers Portable Hover can be picked up at any time—hover, lamp-box, lamp, regulating device, all complete—and moved to a new spot or to any place the operator may desire and the device will continue in operation right along. The lamp need not be removed at this time nor the wick as much as turned down. Is very convenient for cleaning and for moving the chicks from one location to another.

**PLACES TO USE.** Was designed expressly for indoor use—in brooder houses and other poultry buildings, in dwellings or in well-built and well-lighted apartments of any kind, but also will do excellent work in colony houses, in large-sized brood coops and in home-made or factory-built brooder cases. Is highly recommended by us for convenient and economical use in poultry houses or in well-lighted rooms or apartments that have auxiliary heat during coldest winter weather. In moderate winter weather, during the spring months and in warm latitudes, no auxiliary heat is needed.

**PRICE \$8.50.** F. O. B. Milwaukee, complete with regulating device, seamless bowl lamp, fire-proof curtain, tested thermometer, etc., safely packed for shipment.



Shows the Cyphers Company Portable Hover In Use on Floor of Poultry House or any Well-lighted Room or Apartment. Chicks at all times are on a level with the surrounding floor and therefore have no Steps or Incline to Climb Up and Down.

## The Norwich Automatic Exerciser and Feeder.



This device consists of a hopper of sufficient size to carry a supply of grain for flocks of corresponding numbers, and is fitted with an adjustable valve for regulating the feed. Working in conjunction with an agitator disc the Feeder is operated by the birds rotating the bait bar, and the grain escaping from the hopper rattles down the deflector, is scattered on the floor or in the litter in a wide even circle, and the birds kept constantly at work and in motion while feeding. A prong or tooth of the agitating disc instantly checks the flow of the feed and the grain is only delivered when the bait bar is operated by the poultry, and in such quantities as the valve is set to discharge per revolution.

Mounted on adjustable iron legs, the Feeder may be placed anywhere in the house, yard, pen, or on free range, and is operated alike by baby chicks fresh from the incubator or the adult fowl.

By its use the element of waste is completely and absolutely eliminated. Every grain of feed placed in the hopper goes into the flock and the saving thus effected is approximately 25%, while the labor and care of feeding is reduced to simply filling the hopper when empty.

Necessitating slow feeding and exercise, each member of the flock is alert and bright, must work for its living and is fed exactly the same. The effect of this feeding on the condition of the flock and the consequent egg production of the birds is most remarkable and at once apparent in the almost perfect uniformity of the flock.

The machine is absolutely rat and bird proof, delivers fresh clean grain only and thus contributes in no small measure to the health and betterment of poultry culture wherever used.

### PRICE LIST.

No. 1—8 Quart Hopper.	Actual Shipping Weight 13 lbs.....	\$2.50
No. 2—14 Quart Hopper.	Actual Shipping Weight 15 lbs.....	3.25
No. 3—20 Quart Hopper.	Actual Shipping Weight 20 lbs.....	4.10
No. 4—32 Quart Hopper.	Actual Shipping Weight 27 lbs.....	5.00

Send for full descriptive printed matter.

**THEO. KOSS, 488 National Avenue, Milwaukee, Wis.**















THIS LETTER IS FROM

Place a  
Two Cent  
Stamp Here

Name \_\_\_\_\_

P. O. \_\_\_\_\_ State \_\_\_\_\_

*Please Write Your Address Above.*Use this  
Envelope. It  
aids prompt  
Delivery.**THEO. KOSS****488 NATIONAL AVE.****Seeds and Poultry Supplies****MILWAUKEE, WIS.**

THIS IS THE OLD FAMILIAR HEADING AND FIRST PAGE OF

***THE FARM JOURNAL***

THE BIGGEST LITTLE PAPER IN THE WORLD, 36 YEARS OLD, HAS MORE THAN 700,000 SUBSCRIBERS, EVERY ONE PAID IN ADVANCE. IT IS UNLIKE ANY OTHER PAPER, SIGN THIS COUPON BELOW AND MAIL WITH A DOLLAR BILL AT THE PUBLISHERS' RISK.

***TO THE FARM JOURNAL, Philadelphia:***

Enclosed find one dollar, for which please send me the Farm Journal five full years. (see GUARANTEE on the other side.)

Name \_\_\_\_\_

*It, or*  
*R.F.D.*

P.O. \_\_\_\_\_ State \_\_\_\_\_

**Note:** Send direct to the Farm Journal, Philadelphia, Pa. Rate to subscribers in Philadelphia, Canada, and foreign countries. 5 years for \$1.50.

SEE OTHER SIDE



## Mutual Benefit Coupon

It is important to the success of our business that our friends and patrons should be thrifty and prosperous. A wide-awake farm and household paper is a wonderful help to this end, and we therefore have secured for you the best terms for that splendid paper, the

### FARM JOURNAL

You will be delighted with it, and will thank us for introducing it to you. It is for the farmer, the poultryman, the fruit grower, the trucker, stockman, dairyman, villager, suburbanite, the women folks, the boys and girls. Cheerful, clean, honest, full of gumption and sunshine; practical as a plow, readable as a novel. Subscription price is \$1.00 for five years. The publishers do not take shorter subscriptions—5 years or 10 years only—but you take no risk:

#### GUARANTEE

ANY SUBSCRIBER MAY DISCONTINUE THE FARM JOURNAL AT ANY TIME, FOR ANY REASON, OR FOR NO REASON, AND THE UNUSED PROPORTION OF HIS REMITTANCE WILL BE REFUNDED.

PUBLISHERS FARM JOURNAL

Mail this Mutual Benefit Coupon today with A DOLLAR BILL direct to the Farm Journal.

THEO. KOSS, Seedsman, Milwaukee, Wis.  
Garden and Farm Seeds, Poultry Supplies

SEE OTHER SIDE







# KOSS' BARGAIN COLLECTION

BIG VALUE FOR THE MONEY — FULL SIZED PACKETS

## OUR LARGE VEGETABLE GARDEN



Consists of the following 35 packets of our best and earliest varieties of Vegetables and one packet of "Wild Flower Garden," and these **36 Packets** we send postpaid for **only \$1.00**. This collection contains sufficient seed to supply a family garden with Vegetables throughout the summer and fall months.

- |                             |                                 |
|-----------------------------|---------------------------------|
| 1 Pkt. Wax Beans.           | 1 Pkt. Large Erfurt Celeriac.   |
| 1 Pkt. Refugee Beans.       | 1 Pkt. Round Leaf Spinach.      |
| 1 Pkt. Early Peas.          | 1 Pkt. Early Cabbage.           |
| 1 Pkt. Early Sweet Corn.    | 1 Pkt. Late Cabbage.            |
| 1 Pkt. Pickle Cucumber.     | 1 Pkt. Cauliflower.             |
| 1 Pkt. Long Green Cucumber. | 1 Pkt. Curled Kale.             |
|                             | 1 Pkt. Half Long Carrot.        |
|                             | 1 Pkt. Early Purple Top Turnip. |
|                             | 1 Pkt. Kohlrabi.                |
|                             | 1 Pkt. Pumpkin.                 |
|                             | 1 Pkt. Curled Cress.            |
|                             | 1 Pkt. Leek.                    |
|                             | 1 Pkt. Watermelon.              |
|                             | 1 Pkt. Muskmelon.               |
|                             | 1 Pkt. Long White Parsnip.      |
|                             | 1 Pkt. Curled Parsley.          |
|                             | 1 Pkt. Early Tomato.            |
|                             | 1 Pkt. Yellow Onion.            |
|                             | 1 Pkt. Red Onion.               |
|                             | 1 Pkt. Marjoram.                |
|                             | 1 Pkt. Thyme.                   |
|                             | 1 Pkt. Wild Flower Garden.      |

- 1 Pkt. Scarlet Turnip Radish.  
1 Pkt. Long Radish.  
1 Pkt. Early Blood Turnip Beet.

- 1 Pkt. Rutabaga.  
1 Pkt. Squash.  
1 Pkt. Early Curled Lettuce.  
1 Pkt. Head Lettuce.  
1 Pkt. Boston Market Celery.

## THE SMALL VEGETABLE GARDEN

This consists of 17 varieties of Vegetable Seeds and one packet of "Wild Flower Garden."

These **18 Packets** we will send postpaid for **only 50 cents**.

- |                          |                                 |                              |
|--------------------------|---------------------------------|------------------------------|
| 1 Pkt. Wax Beans.        | 1 Pkt. Curled Parsley.          | 1 Pkt. Early Curled Lettuce. |
| 1 Pkt. Early Peas.       | 1 Pkt. Scarlet Turnip Radish.   | 1 Pkt. Round Leaf Spinach.   |
| 1 Pkt. Early Sweet Corn. | 1 Pkt. Half Long Carrot.        | 1 Pkt. Early Tomato.         |
| 1 Pkt. Pickle Cucumber.  | 1 Pkt. Early Blood Turnip Beet. | 1 Pkt. Onion.                |
| 1 Pkt. Early Cabbage.    | 1 Pkt. Purple Top Turnip.       | 1 Pkt. Marjoram.             |
| 1 Pkt. Kohlrabi.         |                                 | 1 Pkt. Wild Flower Garden.   |
| 1 Pkt. Muskmelon.        |                                 |                              |

## TWELVE PACKETS OF FLOWER SEEDS

Most Beautiful Varieties for only 25 cents.



### Bargain Collection.

This Collection of twelve beautiful flowers, each separate in lithographed packets with cultural directions for **only 25 cts.**, worth 60c. An exceptional offer.

**THEO. KOSS,** Milwaukee, Wisconsin